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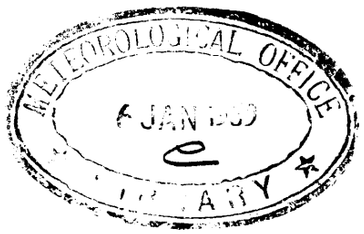

THE OBSERVATORIES' YEAR BOOK

1941

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the Lerwick, Aberdeen, Eskdalemuir, and Kew Observatories

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PREFACE

The *Observatories' Year Book* was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the *British Meteorological and Magnetic Year Book* for the period 1908 to 1921.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939-45 war. Restrictions on supplies and printing since the war resulted in a regrettably long delay in the resumption of publication. In face of the formidable accumulation of arrears, and taking changed requirements into account, it was decided to adopt an abridged form as outlined below.

It was agreed that the General Introduction to the Meteorological Tables and the parts of the Sectional Introductions which deal with site, instruments, procedure and tabulation included in the volume for 1938 should serve as standards of reference for several years; and that only important departures from these standards, together with any requisite additional information, should be included in the relevant parts of the volumes for the years after 1938. The space devoted to the discussion of observations was reduced. Monthly tables of individual hourly values of meteorological elements were discontinued, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility was also discontinued. No major changes were made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1941, presents atmospheric electrical and geomagnetic data for Lerwick Observatory; meteorological data for Aberdeen; meteorological, atmospheric electrical and geomagnetic data for Eskdalemuir; meteorological, atmospheric electrical and atmospheric pollution data for Kew.

Meteorological and geomagnetic data for Valentia Observatory are no longer included in the *Observatories' Year Book*, but are published by the Dublin Department of Industry and Commerce Meteorological Service.

Manuscript tabulations of hourly values of the meteorological elements are available at the observatories. Request for information from these tabulations should be addressed to the Director-General, Meteorological Office, Air Ministry, Victory House, Kingsway, London, W.C.2.

NOTE ON THE TABLES: Maximum and minimum values are shown in italics.

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LERWICK

LERWICK OBSERVATORY

Latitude	60°08′N.
Longitude	1°11′W.
G.M.T. of Local Mean Noon	12h. 5m.
Height of site above M.S.L.	80 to 90 metres

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

ATMOSPHERIC ELECTRICITY

No changes were made in 1941.

TERRESTRIAL MAGNETISM

The average day-to-day change of temperature in the magnetograph house for each of the twelve months of 1941 and for the year as a whole was as follows (in degrees Absolute):—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
0·39	0·26	0·28	0·28	0·38	0·34	0·26	0·34	0·27	0·36	0·34	0·43	0·33

There were 16 occasions on which the change reached or exceeded 1°A.

As already stated in the 1938 Year Book a Smith portable coil magnetometer, which had been reconstructed to operate as a Schuster-Smith coil magnetometer, was brought into use and adopted as the standard instrument for horizontal force in October 1939.

The volume for 1938 contains a statement on the corrections, arising from instrumental changes and comparisons, to be applied to the values of H, D and V published for the years 1923 to 1938. Corresponding corrections have not been applied to the individual values in the four tables for each month given in this volume (1941) but are shown in the tables and repeated below. The values of the elements given in Table 58 and elsewhere in the volume have been corrected.

Corrections

H	−6γ throughout
D	−4·2′ throughout
V	varies from month to month as below

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
−14γ	−15γ	−12γ	−13γ	−12γ	−7γ	−3γ	−4γ	−4γ	−7γ	−10γ	−6γ

NOTES ON THE RESULTS

The factor to change variations of D expressed in minutes to units of force (γ) perpendicular to the magnetic meridian remained as in 1940 approximately 4·19.

Comparing the mean values for all days of 1941 with those for 1940 it is noted that H decreased by 7γ, D (west) decreased by 10·2′ and V increased by 24γ. The ranges between the extreme values recorded during 1941 were H, 3042γ; D, 8°44·8′; and V, 2173γ.

At the assembly of the International Association of Terrestrial Magnetism and Electricity at Washington in September 1939 a new measure of magnetic disturbance, the *K* index, was agreed upon. Measurements of *K* are now given in this volume, replacing the former measure $(HR_H + VR_V)10^{-4}$, in accordance with the International Association of Terrestrial Magnetism and Electricity circular letter dated January 20, 1940.

The *K* index is fully described in *Terrestrial Magnetism and Atmospheric Electricity, Baltimore Md*,44, 1939, p.411. Briefly, a figure is allotted, on a scale 0-9, to each 3-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet day variation. The figures are first allotted from the H magnetogram, and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure.

The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Lerwick is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	10	20	40	80	140	240	400	660	1000

Table I has been slightly changed in form from previous years owing to the omission of $(HR_H + VR_V)10^{-4}$, *K* figures, and their sums, have been given for each day in the main tables, but as it is considered that monthly means of *K* figures are not a good measure of activity, they are not included. Tables II, III, IV and V follow the pattern of previous years.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of 0 days	1 days	2 days	Lerwick	International
January	18	12	1	0·45	0·73
February	10	18	0	0·64	0·82
March	8	17	6	0·94	1·00
April	14	15	1	0·57	0·71
May	15	16	0	0·52	0·64
June	16	14	0	0·47	0·67
July	15	14	2	0·58	0·68
August	17	10	4	0·58	0·69
September	12	15	3	0·70	0·81
October	17	11	3	0·55	0·61
November	14	13	3	0·63	0·75
December	16	14	1	0·52	0·62
Year					
1941	172	169	24	0·60	0·73
1940	178	162	26	0·59	0·72
1939	186	143	36	0·59	0·77
1938	180	133	52	0·65	0·76
1937	119	197	49	0·81	0·73
1936	133	206	27	0·71	0·65
1935	100	245	20	0·78	0·67
1934	168	173	24	0·61	0·56
1933	157	169	39	0·59	0·64
1932	97	230	39	0·84	0·71
1931	121	212	32	0·75	0·66

TABLE II - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1941			Mean 1927-37			1941			Mean 1927-37		
	H	D	V	H	D	V	H	D	V	H	D	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	102	110	113	66	76	65	57	83	74	56	83	66
February	113	124	152	108	98	100	63	93	99	91	107	102
March	323	229	257	130	101	118	179	172	168	109	110	120
April	144	106	127	155	102	120	80	80	83	130	111	122
May	118	89	119	164	97	109	66	67	78	138	105	111
June	134	94	97	133	84	89	74	71	63	112	91	91
July	210	127	143	130	84	90	117	95	93	109	91	92
August	254	125	167	124	87	91	141	94	109	104	95	93
September	317	243	280	122	97	112	176	183	183	103	106	114
October	162	127	140	138	110	125	90	95	91	116	120	127
November	163	127	138	81	84	83	91	95	90	68	91	85
December	115	102	105	75	83	78	64	77	69	63	90	80
Winter	123	116	127	82	85	82	68	87	83	69	93	84
Equinox	237	176	201	136	102	119	132	132	131	114	111	121
Summer	179	109	131	138	88	94	99	82	86	116	96	96
Year	180	133	153	119	92	98	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III - FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1941			Percentage distribution					
				H		D		V	
	H	D	V	1941	1927-37	1941	1927-37	1941	1927-37
γ				%	%	%	%	%	%
0 - 9	0	0	0	0·0	0·0	0·0	0·0	0·0	2·2
10 - 19	0	0	14	0·0	2·3	0·0	0·8	3·8	11·5
20 - 29	15	5	34	4·1	5·8	1·4	3·7	9·3	14·0
30 - 39	16	4	30	4·4	8·1	1·1	5·9	8·2	10·2
40 - 49	28	24	26	7·7	8·6	6·6	9·4	7·1	8·0
50 - 59	35	39	19	9·6	10·8	10·7	13·4	5·2	6·3
60 - 69	33	46	19	9·0	10·5	12·6	13·9	5·2	5·2
70 - 79	33	40	19	9·0	10·2	11·0	10·0	5·2	3·9
80 - 89	32	36	18	8·8	7·6	9·9	8·1	4·9	3·1
90 - 99	18	17	10	4·9	5·6	4·7	6·1	2·7	3·2
100 - 109	26	17	15	7·1	4·0	4·7	4·6	4·1	2·8
110 - 119	15	15	4	4·1	2·7	4·1	3·3	1·1	2·8
120 - 129	11	11	11	3·0	2·6	3·0	3·2	3·0	2·4
130 - 139	4	19	16	1·1	1·6	5·2	3·2	4·4	2·0
140 - 149	6	19	10	1·6	1·6	5·2	2·3	2·7	1·9
150 - 159	8	9	10	2·2	1·4	2·5	1·4	2·7	1·7
160 - 169	3	6	7	0·8	1·4	1·6	1·6	1·9	1·5
170 - 179	6	7	4	1·6	1·1	1·9	1·1	1·1	1·1
180 - 189	1	7	9	0·3	0·9	1·9	1·0	2·5	1·1
190 - 199	3	4	8	0·8	0·9	1·1	0·8	2·2	1·0
200 +	72	40	82	19·7	12·3	11·0	6·2	22·5	14·1
Days omitted	0	0	0	..	..	..	..	..	..

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1927-37
WITH 1941 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		V	H	D	V	H	D	V	H	D
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1927-37	41·1	43·2	8·48	8·0	34·3	7·84	110·4	89·1	12·35
	1941(%)	131	105	108	145	102	104	112	171	119
Winter	1927-37	32·0	19·9	7·08	6·0	13·9	4·22	97·0	61·6	12·85
	1941(%)	159	144	118	193	75	109	156	186	101
Equinox	1927-37	53·1	47·0	9·84	9·8	37·9	8·84	136·3	110·0	14·99
	1941(%)	113	120	116	197	107	102	93	209	181
Summer	1927-37	39·9	67·2	11·64	13·3	53·5	11·45	112·4	121·1	13·59
	1941(%)	139	99	101	112	103	109	138	136	100

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE V - RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1941

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	1·13	1·12	1·03	1·02	1·22	1·13	1·15	1·12	1·06	1·06	1·18	1·10
d	D	1·30	1·29	1·96	1·26	1·20	1·37	2·74	1·23	2·09	1·21	1·34	1·20
q	H	1·06	1·08	1·13	1·11	1·21	1·12	1·06	1·10	1·01	0·97	0·92	1·03
d	H	2·91	2·57	1·66	1·94	1·33	1·21	1·99	2·87	1·43	5·12	3·94	3·75
q	V	1·15	1·70	2·56	1·48	0·98	0·75	0·79	0·67	0·73	1·13	1·64	1·10
d	V	2·12	2·42	1·34	1·93	1·94	2·12	1·42	1·62	1·18	1·61	1·98	1·10

Magnetic disturbances.- Particulars of the principal magnetic disturbances recorded at Lerwick during the year are given in Table VI. In the Eskdalemuir Section will be found a similar list which deals with the same disturbances as recorded at that Observatory. Within the limit of accuracy of measurement and registration "sudden commencements" appear to occur simultaneously at the two Observatories.

TABLE VI - PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT LERWICK, 1941

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1	Jan. 17 0	Jan. 18 5	718	17 16 47	200	17 21 19	518	32·2	17 18 2	-29·3	17 22 17	61·5	1107	17 17 11	721	17 21 13	386
2	Jan. 18 10	Jan. 19 2	466	18 23 33	329	18 19 3	137	14·3	18 23 51	-44·9	18 19 18	59·2	1000	18 18 44	761	18 23 36	239
3	Feb. 21 12	Feb. 22 7	650	21 15 49	214	22 3 38	436	18·4	21 13 32	-22·7	21 15 58	41·1	1084	21 15 48	699	21 23 20	385
4	Feb. 22 12	Feb. 23 5	533	22 16 24	259	22 21 10	274	29·9	22 21 8	-43·4	22 16 32	73·3	1061	22 16 20	663	22 21 6	398
5*	Mar. 1 3 57	Mar. 2 3	988	1 13 49	-190	1 21 19	1178	147·0	1 18 5	-81·1	1 16 7	228·1	1065	1 21 20	113	1 17 59	952
6	Mar. 4 9	Mar. 5 6	452	4 14 31	176	5 0 7	276	16·8	4 24 0	-40·6	4 21 22	57·4	995	4 15 28	681	5 0 12	314
7	Mar. 5 13	Mar. 6 3	466	5 14 37	156	5 22 0	310	18·7	5 14 23	-24·6	5 21 20	43·3	1027	5 18 2	735	5 22 30	292
8	Mar. 13 15	Mar. 15 1	541	14 12 50	-360	14 2 5	901	25·9	14 7 51	-76·1	14 2 6	102·0	1037	14 12 38	575	14 22 53	462
9	Mar. 21 10	Mar. 22 7	532	21 18 43	241	22 3 12	291	21·9	22 3 5	-43·6	21 18 42	65·5	967	21 18 36	734	22 3 24	233
10	Mar. 22 12	Mar. 23 2	522	22 17 58	330	22 23 8	192	14·7	22 23 0	-51·6	22 18 0	66·3	1029	22 17 55	787	22 23 18	242
11	Mar. 23 11	Mar. 24 4	478	23 21 40	336	23 11 26	142	19·8	23 22 20	-21·7	23 21 37	41·5	961	23 16 54	766	23 22 18	195
12	Mar. 28 0	Mar. 29 5	927	28 17 45	45	28 21 6	882	34·0	28 15 5	-40·1	28 20 51	74·1	1098	28 17 37	559	28 21 5	539
13	Mar. 29 13	Mar. 30 8	663	29 18 59	-38	29 22 35	701	42·2	29 21 30	-55·3	29 22 27	97·7	1049	29 18 54	552	29 22 35	497
14	Mar. 30 11	Apr. 1 2	701	30 19 14	-637	30 23 34	1338	96·3	30 21 56	-137·7	30 23 32	234·0	1171	30 19 18	393	30 21 52	778
15	Apr. 18 21	Apr. 20 4	459	19 19 2	228	19 5 25	231	32·8	19 6 12	-36·4	18 22 6	69·2	977	19 18 20	698	19 6 3	279
16	Apr. 24 7	Apr. 25 9	786	24 14 14	-47	25 1 18	833	32·7	24 17 24	-23·7	24 22 26	56·4	1071	24 14 25	678	25 0 51	393
17	May 21 12	May 22 8	480	21 17 34	47	22 1 10	433	16·5	21 17 34	-21·8	21 22 23	38·3	947	21 18 58	561	22 3 20	386
18*	June 10 13 17	June 11 8	540	10 16 1	337	10 13 7	203	27·8	10 15 32	-13·8	11 5 56	41·6	1011	10 17 20	853	10 13 18	158
19*	June 13 3 42	June 14 8	491	13 18 0	41	14 0 17	450	16·8	13 13 14	-50·6	14 2 51	67·4	944	13 19 7	546	14 2 32	398
20	June 17 14	June 18 6	485	17 18 49	120	18 2 47	365	15·9	17 20 49	-22·9	18 1 54	38·8	919	17 19 0	696	18 3 13	223
21*	July 4 3 43	July 7 24	1429	5 14 52	-759	5 7 19	2188	78·2	5 14 53	-187·9	5 11 2	266·1	1232	5 21 15	-55	5 14 50	1287
22	July 21 1	July 22 6	511	21 20 0	204	21 9 19	307	15·1	21 6 21	-20·0	21 20 3	35·1	979	21 19 21	760	21 6 37	219
23	Aug. 2 0	Aug. 3 3	649	2 16 5	278	2 2 50	371	17·9	2 2 47	-10·6	2 15 48	28·5	1090	2 15 57	717	2 3 4	373
24*	Aug. 4 1 29	Aug. 5 7	1308	4 14 28	-344	5 0 37	1652	47·0	4 20 39	-85·1	4 23 28	132·1	1146	4 13 15	536	4 4 56	610
25	Aug. 26 14	Aug. 28 4	558	27 15 26	-319	27 0 33	877	17·2	27 1 32	-58·5	26 23 59	75·7	1087	27 14 43	454	27 0 29	633
26	Aug. 29 8	Aug. 30 7	521	29 17 25	116	30 0 40	405	13·1	30 0 36	-22·6	30 1 23	35·7	1023	29 17 16	667	30 0 22	356
27*	Sept.13 7 58	Sept.16 7	521	13 14 36	141	16 1 42	380	23·6	16 1 26	-36·5	16 1 55	59·9	1033	15 18 52	615	16 1 38	418
28	Sept.18 3	Sept.21 18	1213	18 13 38	-1613	19 4 15	2826	218·8	19 4 39	<-306·0	18 23 55	>524·8	1819	19 0 42	-354	19 5 5	2173
29	Sept.24 12	Sept.25 6	451	24 18 40	-317	24 23 29	768	15·8	24 13 27	-47·1	25 0 9	62·9	1049	24 18 41	546	24 23 14	503
30	Oct. 11 6	Oct. 12 9	651	11 19 4	-129	11 22 54	780	25·5	11 19 34	-66·9	11 23 7	92·4	1066	11 17 40	404	11 23 19	662
31	Oct. 22 10	Oct. 23 1	797	22 17 50	-264	22 22 28	1061	52·6	22 17 47	-41·8	22 22 50	94·4	1080	22 16 55	674	22 22 21	406
32*	Oct. 31 3 42	Nov. 1 21	810	1 14 32	-432	1 1 23	1242	93·6	31 23 51	-131·8	1 0 19	225·4	1092	31 23 41	405	1 4 12	687
33	Nov. 5 15	Nov. 7 3	689	6 17 56	46	6 21 46	643	15·0	6 13 0	-52·3	6 18 6	67·3	1135	6 17 56	686	6 21 40	449
34*	Nov. 27 3 42	Nov. 28 23	810	28 18 33	180	28 7 11	630	22·9	28 6 52	-50·4	28 18 42	73·3	1058	28 18 27	760	28 5 59	298
35*	Dec. 1 5 59	Dec. 2 21	1142	1 14 53	-295	1 21 29	1437	60·8	1 16 34	-87·7	1 14 51	148·5	1110	1 14 4	241	1 14 52	869
36	Dec. 13 11	Dec. 14 24	532	13 18 36	311	14 3 37	221	14·6	13 17 21	-37·8	14 12 7	52·4	1079	13 18 30	770	14 3 25	309

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk(*), and the time entered in the second column is that of the "sudden commencement" estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added: H, 14000γ; D, 12°; V, 46000γ.

REMARKS ON THE AUTOGRAPHIC RECORDS 1941

The Lerwick mean character figure for the month is shown in brackets after the name of the month.

JANUARY (average character figure 0·45).- Although there were no large disturbances during January, the traces were never free from small irregularities for more than a few hours at a time.

A very slight disturbance, which broke out on the afternoon of the 1st, died down in the early hours of the 2nd to give way to a calmer spell, which was in turn brought to an end by a small "sudden commencement" at 5d.15h.42m. Shallow bays in all the elements between 6d.1h. and 7h. were the only signs of any resultant disturbance. The magnetic field behaved similarly, with frequent departures of up to 20γ and occasional ones up to 100γ, until the 17th; the nearest approaches to quiet conditions were 14d.0h. to 14d.21h. and 15d.3h. to 16d.12h.

The largest disturbance of the month began at 17d.0h. when H and V executed bays 250γ and 150γ deep respectively and D swung through 48′, all being quiet again by 4h. Small irregular rapid pulsations were apparent from 11h.40m. until 12h.20m., and H and V formed peaks 300γ and 200γ above normal respectively at 17h. After another active period from 21h. to 24h. the storm appeared to be over, but it was not until the 20th that conditions

could be called quiet. The smooth traces on the 20th and 21st were interrupted at about 21h. by small humps, which reappeared in an enhanced form on the 22nd. Peaks in H and V on the afternoon of the 23rd indicated the return of minor disturbance, which prevailed until the 28th, the only noteworthy feature being a sharp trough in H centred at 26d.0h. 17m., when the minimum of the month 14087γ was recorded. The last three days of the month were moderately quiet.

FEBRUARY (average character figure 0·64γ).- In general magnetic character February was similar to January, but the minor disturbance was still more prevalent and quiet days less frequent.

The initial calm conditions ended with a symmetrical peak in V centred at 2d.21h., which proved to be the beginning of a 7-day spell of minor activity. There were no outstanding features during this spell, nor during another similar one from 13d. to 18d. which succeeded the intervening quieter period. The 18th and 19th were quiet apart from small bays in D at 18d.20h. and 19d.17h. Mild disturbance was renewed during the evening of the 20th and developed into a minor storm on the 21st. Peaks in H and V and a shallow trough in D at 21d.16h. were followed by irregular oscillations of up to 150γ, which had hardly died down when further peaks in H and V were formed at 22d.16h.20m. This time the accompanying trough in D was over 50′ deep. Activity continued on this scale throughout the 23rd and on a reduced scale until the 26th. The last two days of the month were fairly quiet.

MARCH (average character figure 0·94).- With six days classified as "2" and only eight as "0", this was the most disturbed month since April 1939.

A "sudden commencement" at 1d.3h.57m. (-6γ, 34γ in H; -5·0′, 20·5′ in D) heralded the first major storm. After 9 hr. of irregular movements, severe disturbance began shortly after 13h. with a rise of 600γ in H to its maximum for the month of 14994γ at 13h.49m. and a fall of 650γ in V. H returned to normal by 14h.30m. and oscillated irregularly about a slightly sub-normal value for the rest of the storm with amplitudes of up to 1000γ. Its minimum of 13816γ at 21h.19m. was surprisingly high for such a large storm. V remained very low until 20h., its mean over the period 14h. to 20h. being 450γ below normal; the minimum for the month of 46125γ occurred at 17h.59m. The most outstanding feature in D was a sharp peak up to 14° 31·2′ at 18h.5m., which was the maximum for the month. Violent activity was over by 22h., but the storm continued in a reduced degree until 2d.3h.

The magnetic field remained in a disturbed state with diurnal ranges up to 300γ in H and V and 50′ in D until the 10th, which was a fairly quiet day. A short well defined minor disturbance from 11d.19h. to 24h. temporarily interrupted the quieter spell, and it ended on the 13th when a more severe storm set in gradually during the late afternoon. The most active period was 14d.0h. to 14d.3h. during which H formed a bay over 600γ deep. Milder disturbance lasted throughout the 14th and 15th, the most prominent feature being simultaneous bays in H and V centred at 14d.23h. The ensuing spell of relatively quiet conditions was terminated on the 19th by a return of moderate disturbance, which prevailed until the 24th with, however, no outstanding movements. From 25d.0h. until 28d.0h. it was again quiet; on the 26th and 27th there were no "K" indices greater than 1.

Shallow bays in all three elements at 28d.2h. marked the opening of another series of disturbances. A sharp peak up to 14933γ in H at 28d.17h.45m. was followed at 21h. by troughs in all the elements. The next active spell was 29d.19h. to 29d.23h., during which ranges of 701γ, 497γ and 97·7′ were recorded in H, V and D respectively. The largest of the month's storms developed on the evening of the 30th. H and V were already well above normal when at 19h.11m. there was a sudden increase in activity. H formed a fairly shallow bay at 21h. and a very sharp trough 600γ deep at 21h.40m. Its minimum of 13369γ occurred at 23h.34m. during another deeper bay, which lasted from 22h. until 31d.2h., apart from a temporary recovery at midnight. The V trace was very similar to the H one, except that the minimum of 4645γ occurred during the trough at 21h.52m. and that the second bay was not nearly so deep. D increased 82′ in 4 min. at 19h.10m., recovered equally quickly and then executed

a series of more rapid and more complicated oscillations between 21h.45m. and 22h.10m. Its minimum of 9° 46·5′ at 23h.32m. was followed by a peak centred at 31d.0h.45m. By 4h. the magnetic field had practically settled down and this process continued with occasional lapses for the rest of the day.

APRIL (average character figure 0·57).- Although there was much less severe disturbance in April than in March there was little reduction in the amount of minor activity.

The first 12 days were marked by intermittent slight disturbance which was most active from 7d.20h. to 8d.1h. and 10d.14h. to 10d.24.; the most prominent feature was a trough 250γ deep in V centred at 7d.23h.45m. Quiet conditions prevailed from the 13th to 17th, the 14th being especially free from the small fluctuations which characterize so many quiet days at Lerwick.

Further minor activity developed on the 18th with a double oscillation of up to 40′ in D shortly after 21h. and shallow troughs in H and V some 9 hr. later. A short quiet spell from 21d.21h. ended at 24d.7h. when the only large storm of the month began with some small rapid oscillations. H was much more affected than the other elements, its range of 833γ being more than double the ranges in V and D. The initial phase lasted for 6 hr. and then H rose 430γ in an hour to its maximum of 14792γ at 14h.14m. It formed a second peak at 17h.35m. before falling irregularly to its minimum at 25d.1h.18m. Although there were no other large movements the succeeding minor disturbance did not disappear until the early hours of the 27th. Apart from another brief recurrence of mild disturbance from 28d.15h. to 29d.4h. which culminated in troughs in all the elements centred at 29d.2h., the remainder of the month was very quiet.

MAY (average character figure 0·52).- There was nothing of note in the first three weeks; on most days the normal diurnal variation stood out fairly clearly in spite of frequent small irregular departures from the smooth curve. Minor disturbance set in during the afternoon of the 21st and reached its climax in the early hours of the 22nd with shallow troughs in H and V. Mild disturbance with no outstanding features continued until the 26th; the last few days of the month were relatively quiet.

JUNE (average character figure 0·47).- Like May, this was a month with no large storms but an almost continuous undercurrent of minor activity.

The opening quiet spell was interrupted by a complex "sudden commencement" at 9d.9h.13m. and terminated by a double "sudden commencement" at 10d.13h.17m. (-34γ, +111γ, -49γ, +57γ in H; -2·6′, +8·3′, -15·0′, +16·5′ in D; -10γ, +32γ, -44γ, +23γ in V). The traces had an unusual serrated appearance on the remainder of the 10th and throughout the 11th. Yet another small "sudden commencement" at 13d.3h.42m. ushered in the largest of the month's disturbance. Enhanced afternoon peaks in H and V were followed by the usual irregular bays in all three elements shortly after midnight. Quiet conditions made a short reappearance on the 16th but gave way to further mild disturbance on the 17th which continued spasmodically until the 21st. The remainder of the month lacked large movements but the traces were seldom really smooth.

JULY (average character figure 0·58).- This month was marked by the largest storm ever recorded at Lerwick in July.

A "sudden commencement" at 4d.3h.43m. (+21γ in H; -1·3′, +8·0′ in D) was the first sign of activity. The ensuing disturbance appeared to have died out by 22h., but developed into a major storm after midnight. Bays over 300γ deep in H and V centred at 5d.3h. were followed by another big increase in severity at 6h. H fell 1150γ in less than 1½ hours and remained well below normal until 10h. It then rose rapidly and formed a series of peaks, the maximum value of the year, 15435γ, being reached at 14h.52m. V oscillated about a slightly subnormal value until 9h. with a maximum amplitude of 480γ. After rising to 47192γ at 10h.23m. it formed three very deep bays, centred at 11h., 13h. and 15h.; the minimum of 45948γ was reached at 14h.50m. D was also very disturbed throughout the period 6h. to 16h., the outstanding feature being a decrease of 140′ in 3 min. ending at 14h.48m., followed by an immediate rise of 240′

in 5 min. and another fall of 170′ in 3 min. The storm had subsided by 16h. but there was another short outburst of violent activity from 21h.10m. to 21h.40m., during which ranges of 630γ, 145′ and 750γ were recorded in H, D and V respectively. On the remainder of the 6th it was only mildly disturbed, while in the early hours of the 7th there were bays 300γ and 250γ deep in H and V respectively. This was the last big movement of the month, although conditions were seldom really quiet; the 28th was the only day with no "*K*" index greater than 1.

AUGUST (average character figure 0·58).- This was again a month of considerable disturbance.

Minor disturbance set in on the morning of the 2nd but died away after moderate afternoon peaks in H and V had been formed. The largest storm of the month was heralded by a "sudden commencement" (+21γ in H; +6·8′ in D) at 4d.1h.29m. All three elements developed troughs at 5h., and remained slightly subnormal for several hours. Shortly before noon H began to rise and continued doing so until it had reached the unusually high value of 15314γ at 14h.28m. Over the period 14h. to 17h. its average value was 400γ above normal. After a lull from 18h. to 21h. H formed a series of troughs with a minimum of 13662γ at 5d.0h.37m. By 4h. it had almost completely recovered. Changes in V and D were neither so large nor so rapid as in H; their ranges were 610γ and 132·1′ as compared with 1652γ in H.

Apart from a double trough in H accompanied by smaller deflections in V and D at midnight of the 6th to 7th there was nothing further of note until the 26th. Mild disturbance was apparent during the afternoon when H and V had enhanced peaks. By 21h. all the elements were falling fairly steadily; shortly before midnight the fall in H accelerated and a deep bay was formed. The magnetic field was almost back to normal at 27d.3h. but minor activity continued for the rest of the month.

SEPTEMBER (average character figure 0·70).- September will long be remembered for the exceptionally violent storm of the 17th and 18th.

The minor activity prevalent when the month opened gradually gave way to calmer conditions. A "sudden commencement" at 7d.4h.39m. (−4γ, +25γ in H; −2·9′, +6·8′ in D) brought a temporary return to mild disturbance, but otherwise the period 3rd to 13th was fairly quiet. This spell was broken at 13d.12h. by a slight disturbance which continued intermittently with no outstanding features until the 17th.

Rapid oscillatory movements in all the elements from 18d.4h.50m. were the only warning of by far the largest storm yet recorded at Lerwick. The oscillations increased in amplitude until at 7h. H was swinging through about 300γ every minute. At 9h. the rapid oscillations became more irregular and overshadowed by much larger slower movements. H rose in steps to its maximum of 15219γ at 13h.38m., fell 750γ in 22 min. developed a second broader peak from 14h. to 15h., and then formed a very sharp trough centred at 15h.35m., from which it recovered with a rise of over 1100γ in 6 min. D, which had hitherto not departed more than 90′ from its normal value, also reflected this short spell of intense activity. From 15h.31m. it rose 196′ in 8 min. to its maximum of 15° 43·0′ and then fell 191′ in the following 14 min. The third and final peak in H ended after 16h. when a series of broad oscillations brought it down in steps to its normal value by 17h. Its fall was renewed at 18h. and its average value was 1000γ below normal until 19d.8h. Between 18d.23h. and 19d.5h. it was frequently too low to be recorded by the extreme minimum trace of the la Cour variometer but was completely recorded by the supplementary instrument. The minimum of 12393γ at 4h.15m. is the lowest value of H yet recorded at Lerwick. Changes in D became extremely violent after 18d.23h. and between then and 19d.7h. there were numerous swings of several degrees in a few minutes. Its minimum between 23h.50m. and 24h.0m. was beyond the range of the third reflected la Cour trace and still further beyond the range of the supplementary variometer. The minimum value recorded was 6° 58·2′, the lowest ever experienced at Lerwick. The V trace was unusually disturbed throughout the storm, with swings of up to 800γ superimposed on a broad bay from 13h. to 18h.,

a broad peak from 19h. to 19d.1h. and a succession of ups and downs about a rather sub-normal value for the remainder of the storm. Its minimum at about 5h.5m. was also beyond the range of both instruments, the lowest recorded value being 45650γ.

Severe disturbance was over by 19d.9h. but there was a further short outburst between 19h. and 21h., during which time H formed a trough 600γ deep, V rose 580γ to a sharp peak and D oscillated through 75′. After some further minor activity the period 21d.19h. to 23d.7h. was quiet. The remainder of the month was characterized by renewed mild disturbance which reached its climax on the night of the 24th to the 25th when there were broad bays in all the elements.

OCTOBER (average character figure 0·55).- The high level of magnetic activity was maintained throughout the month.

The month opened very quietly and there were no large departures from the normal diurnal variation until the 11th, when a small storm developed during the afternoon. Peaks in H and V shortly before 18h. were followed by a period of rapid changes which in turn gave way to a lull at 19h. All the elements started to fall at 22h. and formed bays between then and 12d.1h. After a shallower bay in H at 3h. the magnetic field quickly recovered to its normal value. The ensuing quiet spell was interrupted by slight activity on the 16th and terminated by a second small well defined disturbance on the 22nd. H became erratic at 13h.20m. and started a definite rise at 15h. The maximum of 14803γ at 17h.50m. was succeeded by a very sharp trough with a minimum of 13742γ at 22h.28m. Ranges in V and D were less than half that in H but their traces followed the same general trend. The storm subsided very suddenly and by midnight all was quiet. Minor activity broke out spasmodically between then and the 25th which brought a return to more continuous calm. This spell was ended by a major disturbance which set in with steady rises in H and V at 31d.15h. Broad peaks from 17h. to 20h. and bays from 21h. to 23h. were accompanied by similar but more irregular movements in D. The most violent activity began at 23h. with rises in V and D and a fall in H. After its minimum at 23h.20m. D rose over 3° to its maximum of 13° 37·8′ at 23h.51m. The storm was at its height as the month ended.

NOVEMBER (average character figure 0·63).- Disturbance was again fairly frequent and on a considerable scale.

The month opened with all the elements falling rapidly, especially D which dropped 3° 45·4′ in 28 min. to its minimum at 1d.0h.19m. H formed a bay 600γ deep centred at 1h. and remained very sub-normal until 6h. V executed several swings of over 300γ before settling down to a broad bay from 3h. to 6h. By 8h. it seemed that the storm was over but there was a further period of disturbance from 13h. to 18h., during which the main feature was a peak in H with a maximum of 14816γ at 14h.32m. Activity decreased suddenly at 18h. and 3 hr. later all the traces were quite smooth.

The quiet conditions gave way to minor activity on the 5th, which developed into a more pronounced disturbance on the 6th. A needle-like peak 250γ high in H centred at 17h.56m. was the only noteworthy feature. Slight disturbance continued intermittently for several days, and was renewed on the 17th after a short intervening quiet spell from the 13th to 16th. Small storms with the customary afternoon peaks and night bays occurred on the 17th and 18th and the magnetic field did not settle down again until the 24th. The period 24d.3h. to 27d.3h. was fairly quiet.

A small "sudden commencement" at 27d.3h.42m. gave nearly 24 hr. warning of the next storm. Broad shallow depressions in H and V from 28d.4h. to 9h. led to a spell of small irregular oscillations of the order of 10γ. A sharp peak in H centred at 18h.33m. marked the climax of the disturbance and by 23h. quiet had returned. The last two days of the month were free from disturbance.

DECEMBER (average character figure 0·52).- After a stormy opening to the month the magnetic field settled down to the quieter conditions generally associated with midwinter.

The only large disturbance of the month, during which the maxima and minima for the month in all three elements were recorded, began with some small irregular movements of the "sudden commencement" type at 1d.5h.59m. The irregular movements gradually increased in amplitude until at 13h.40m. they were absorbed in very much larger and more violent changes. H formed a high peak up to 15148γ at 14h.53m. while V and D were executing sharp troughs down to 46247γ at 14h.52m. and 10° 36·5′ at 14h.51m. respectively. V and D were almost back to normal by 16h. but H did not recover until 18h. Another active period between 21h. and midnight included two troughs in H, a shallower one in V and a small peak in D. All the elements were slightly subnormal in the early hours of the 2nd but had returned to normal by 7h. apart from small irregular oscillations which in turn ceased at 21h.

Minor activity broke out on the nights of the 3rd, 4th and 5th. From 6d.6h. it was fairly quiet until 13d.16h. when small humps occurred in the H and V traces. Slight disturbance continued throughout the 14th and more intermittently from the 15th to 18th. A "sudden commencement" at 18d.7h.1m. (+13γ, -28γ in H; -2·0′, +9·5′ in D; -10γ, +14γ in V) was followed by several hours of small rapid oscillations, rather more irregular than "giant pulsations". The remainder of the month was quiet apart from a few outbreaks of very slight disturbance on the 23rd, 27th, 28th and 29th.

POTENTIAL GRADIENT (reduced to level surface)

Mean values for periods of sixty minutes between exact hours, G.M.T.

1 LERWICK 1941

	JANUARY, factor 1·26				FEBRUARY, factor 1·31				MARCH, factor 1·38			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	91	126	238	144	86	Z±	Z-	-47	183	>435	532	-
2	103	123	147	106	56	145	121	189	-	-	208	280
3	56	94	118	159	<118	429	367	222	-65	137	90	31
4	103	153	200	226	101	154	92	127	-168	-75	34	Z-
5	238	206	341	506	80	<-30	65	110	68	<-249	140	460
6	273	265	212	141	Z-	68	118	181	-31	143	-75	208
7	50	112	173	132	65	-189	148	255	109	155	137	137
8	97	147	121	123	154	136	<-992	198	96	128	165	264
9	94	153	135	71	385	278	234	>385	187	162	31	252
10	82	150	138	159	62	77	127	41	87	137	193	96
11	88	138	147	147	47	110	160	118	59	118	134	96
12	85	>367	88	12	127	136	136	154	72	106	118	155
13	85	Z+	179	179	92	92	154	62	106	155	199	187
14	Z±	403	159	206	15	-	-	-	152	258	249	267
15	206	191	194	373	-	-	68	65	190	575	429	526
16	194	809	Z±	Z±	89	213	210	169	221	171	168	155
17	232	Z±	<-59	<-515	139	127	172	148	106	121	137	180
18	238	>617	138	159	-18	278	192	204	152	121	261	109
19	147	171	229	118	77	86	115	145	180	62	140	199
20	203	156	232	253	77	145	252	243	155	-264	118	118
21	191	100	138	121	95	237	172	207	96	395	<109	19
22	100	109	126	91	83	266	184	Z±	96	87	100	0
23	88	109	138	150	163	89	107	133	93	131	199	252
24	73	94	176	162	112	408	127	172	87	190	199	159
25	73	>723	132	159	53	95	148	133	>420	165	183	152
26	100	129	159	179	252	107	107	115	100	115	134	131
27	103	121	115	103	101	124	74	65	-202	128	139	155
28	88	106	126	138	246	299	-53	299	112	128	407	134
29	126	176	91	129					-47	196	<-112	299
30	150	153	179	179					128	420	137	90
31	121	68	194	182					84	218	131	358
(a)	129	216	164	166	115	178	152	166	134	191	180	189
(b)	124	140	169	171	102	144	135	154	95	154	164	177
Mean	(a) 169		(b) 151		(a) 153		(b) 134		(a) 173		(b) 147	

	APRIL, factor 1·40				MAY, factor 1·36				JUNE, factor 1·36			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	95	92	41	177	95	147	165	168	113	107	77	77
2	133	142	158	139	153	156	147	171	89	98	116	107
3	142	155	196	139	122	119	129	138	104	119	113	122
4	161	152	291	133	98	6	135	177	278	187	73	171
5	44	76	126	152	119	119	122	141	89	156	135	150
6	92	92	164	218	92	86	64	141	119	138	135	177
7	111	88	88	133	64	83	190	-122	125	138	119	144
8	54	88	104	114	89	110	-413	98	113	141	125	156
9	82	92	98	145	92	187	86	174	144	184	205	159
10	73	88	-3	Z-	104	153	226	135	122	141	119	116
11	-231	171	130	107	150	223	294	196	107	89	95	125
12	-278	114	136	149	144	165	150	150	49	-73	0	86
13	25	142	202	<-664	83	95	95	86	55	61	95	125
14	114	101	66	85	55	<49	266	135	-689	171	398	187
15	114	92	104	111	<-214	<-92	156	144	177	101	89	113
16	Z±	>284	<-743	234	104	132	343	0	86	83	162	-174
17	107	92	123	265	89	-43	92	165	162	150	181	135
18	199	25	152	212	-324	177	226	-349	110	196	181	190
19	161	186	212	44	-92	144	80	147	122	132	147	80
20	95	60	117	<-553	73	107	73	77	116	95	138	129
21	92	126	161	82	184	12	52	196	70	165	229	122
22	88	32	95	114	343	242	869	364	144	217	159	306
23	101	85	114	234	187	257	156	70	416	196	>1316	318
24	92	88	76	85	211	254	205	<223	162	410	202	398
25	63	101	155	142	275	211	245	569	441	398	468	312
26	85	104	107	145	401	110	43	61	413	214	266	110
27	95	117	117	123	-92	187	61	236	43	181	153	-
28	85	149	161	171	370	431	208	367	-	104	110	245
29	111	171	161	139	300	125	110	101	138	217	168	184
30	136	224	133	167	83	116	147	174	125	153	95	275
31					153	168	168	125				
(a)	102	118	135	147	157	151	177	170	151	164	196	172
(b)	79	114	133	143	124	144	152	141	114	155	159	151
Mean	(a) 125		(b) 117		(a) 164		(b) 140		(a) 171		(b) 145	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)

Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 1·37				AUGUST, factor 1·31				SEPTEMBER, factor 1·29			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	231	136	123	136	198	110	136	151	198	134	163	Z±
2	136	114	246	188	77	178	110	142	157	145	140	145
3	74	18	102	139	101	249	142	145	125	186	116	157
4	123	-12	-43	136	95	-118	249	195	108	172	131	285
5	114	154	123	-37	151	136	47	142	113	157	154	163
6	268	490	126	228	133	145	86	6	111	108	143	157
7	139	259	206	92	50	-104	169	112	111	87	99	145
8	126	95	176	141	92	71	-178	172	113	140	215	87
9	74	120	157	259	92	136	160	228	210	297	259	212
10	290	739	370	499	115	83	308	287	102	128	111	20
11	222	172	108	188	533	204	219	237	84	96	137	125
12	151	203	231	274	355	317	166	124	96	116	140	131
13	182	151	185	163	110	151	148	-59	96	361	105	-559
14	123	142	117	111	115	121	-118	175	99	113	119	143
15	59	80	274	628	186	148	157	160	90	113	105	119
16	62	650	95	219	175	172	160	329	93	131	137	134
17	-86	216	277	542	169	228	400	622	230	340	268	259
18	219	206	<-354	-62	308	178	181	201	201	300	145	143
19	<-662	311	299	262	403	337	169	438	111	317	550	180
20	108	129	-40	219	462	352	379	524	105	271	-	175
21	145	92	154	246	210	Z±	136	222	99	111	154	244
22	145	172	92	55	41	293	287	86	154	178	247	108
23	77	203	59	117	210	192	130	329	61	207	326	565
24	92	74	249	665	86	98	115	269	268	210	105	55
25	222	262	283	213	157	112	112	142	84	367	416	652
26	416	126	330	711	118	166	92	195	96	311	169	210
27	197	179	185	271	133	181	160	210	204	372	236	346
28	579	616	447	308	234	388	417	426	308	230	140	172
29	172	274	370	197	249	329	219	278	111	102	122	108
30	253	296	237	545	240	204	154	148	111	108	122	239
31	203	114	231	465	110	101	95	222				
(a)	179	226	209	283	184	192	183	231	135	197	182	196
(b)	169	216	189	273	183	172	162	221	134	197	183	169
Mean	(a) 224		(b) 212		(a) 197		(b) 185		(a) 177		(b) 171	

	OCTOBER, factor 1·30				NOVEMBER, factor 1·35				DECEMBER, factor 1·33			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	88	79	152	129	105	182	198	188	139	167	211	105
2	70	82	64	202	158	142	247	170	77	-3	62	223
3	79	179	111	117	111	179	192	173	239	245	245	149
4	94	299	132	360	124	303	188	185	93	192	77	152
5	138	105	111	185	Z±	133	Z-	43	59	87	>248	>419
6	164	91	167	-223	>603	167	-15	>380	37	-62	-164	31
7	>530	378	155	352	Z-	300	179	Z±	19	31	304	118
8	211	64	149	32	-	127	151	148	90	143	-6	74
9	50	117	144	123	148	99	102	130	53	93	-	93
10	88	91	91	120	77	142	108	136	-43	99	133	96
11	70	62	100	9	117	62	142	136	96	112	112	375
12	32	53	103	108	121	-176	-253	-321	Z±	161	<171	90
13	56	120	138	173	-62	22	31	Z-	Z±	-6	344	310
14	117	-111	-155	76	40	-43	111	68	102	<-84	177	>366
15	56	70	100	79	37	148	226	173	<-115	109	130	254
16	123	41	381	149	99	<0	275	Z±	>319	9	105	25
17	423	278	170	114	14	-8	21	17	71	65	71	118
18	88	108	117	105	179	139	127	99	87	133	177	31
19	67	59	114	26	96	226	229	-216	<-611	133	189	158
20	76	41	59	56	53	117	151	<-56	133	146	251	96
21	Z±	88	88	94	334	281	198	>145	50	0	105	99
22	35	50	94	79	250	290	170	130	109	<-543	-47	99
23	73	79	88	88	102	-729	28	74	28	-180	96	-496
24	62	120	176	100	90	219	318	204	-6	37	56	12
25	76	123	64	82	244	145	108	343	28	260	109	149
26	32	76	67	105	83	121	3	241	37	93	127	174
27	-129	123	144	91	117	121	-572	71	62	152	87	276
28	94	97	100	91	71	-3	130	127	59	124	77	105
29	-	-	117	138	43	142	164	133	65	115	152	130
30	21	29	129	208	130	164	256	176	68	50	130	115
31	85	123	-147	138					-	96	96	186
(a)	111	111	125	124	136	159	156	154	88	114	150	154
(b)	87	95	106	104	112	85	102	111	68	91	115	102
Mean	(a) 118		(b) 98		(a) 151		(b) 103		(a) 127		(b) 94	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

	(a)	135	168	167	179
	(b)	116	142	147	160
Annual means		(a) 162		(b) 141	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 29	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	-24	-25	-31	-36	-34	-35	-38	-23	-8	-8	-10	+5	+15	+18	+9	+31	+36	+39	+51	+47	+23	+10	+5	-19	+24	11	153
Feb.	-28	-36	-35	-34	-38	-32	-22	-18	-6	+13	+26	+12	+10	+9	+13	+32	+52	+31	+27	+27	+6	+2	-1	-10	-12	5	119
Mar.	-36	-44	-43	-52	-44	-32	-23	+6	+20	+3	-2	-1	+1	0	+23	+38	+49	+46	+41	+35	+30	+5	+3	-25	+22	13	168
Apr.	-1	-26	-29	-34	-32	-26	-15	-3	0	-13	-16	-11	-5	-2	+1	+9	+21	+21	+31	+38	+36	+22	+22	+14	-16	11	119
May	+25	+12	-7	+5	+6	+4	+11	+8	+5	+20	-5	-4	0	-16	-6	+9	+4	-14	-10	-14	-10	-19	-26	+24	+10	11	170
June	-17	-11	-11	+3	-6	-5	-10	+2	-7	+1	-13	-17	+7	+1	+10	+29	+10	-2	-4	+6	+4	+15	+9	+7	-37	15	156
July	+9	-2	-46	-22	+11	+12	-16	-18	-56	-61	-58	-45	-40	-37	-16	-13	-12	+1	+5	+60	+89	+94	+101	+59	-10	10	212
Aug.	-13	-6	-5	-19	+31	+42	+39	+26	+8	-21	-30	-42	-36	-23	-29	-19	-30	-27	-3	+19	+53	+43	+42	-1	0	13	212
Sept.	-20	-46	-47	-39	-45	-25	-23	-3	+16	-6	-13	-21	-5	+11	+32	+28	+20	+18	+33	+43	+46	+45	+8	-8	+15	16	170
Oct.	-23	-38	-38	-19	-27	-13	-7	-7	+16	+12	-25	-29	-5	+4	-18	-13	-1	+26	+53	+59	+40	+50	+9	-5	+15	6	130
Nov.	-26	-23	-18	-25	-17	-13	+5	+8	+12	+3	+24	+32	+36	+27	+21	-5	+11	+7	+7	+4	-5	-14	-24	-27	+3	9	152
Dec.	-33	-40	-43	-40	-38	-21	-13	+12	+21	+35	+47	+13	+27	+33	+1	-11	-17	-10	+26	+75	+78	-9	-48	-41	+24	2	117
Year	-16	-24	-29	-26	-19	-12	-9	-1	+2	-2	-6	-9	0	+2	+3	+10	+12	+11	+21	+33	+33	+20	+8	-3	+3	122	157
Winter	-28	-31	-32	-34	-32	-25	-17	-5	+5	+11	+22	+15	+22	+22	+11	+12	+21	+17	+28	+38	+25	-3	-17	-24	+10	27	135
Equinox	-20	-39	-39	-36	-37	-24	-17	-2	+13	-1	-14	-15	-3	+3	+9	+15	+22	+28	+39	+44	+38	+31	+11	-6	+9	46	147
Summer	+1	-2	-17	-8	+11	+13	+6	+5	-13	-15	-27	-27	-17	-19	-10	+1	-7	-11	-3	+18	+34	+33	+31	+22	-9	49	187
	1a and 2a days only*																										
Jan.	-53	-137	-28	-53	-69	-37	-27	+33	+22	+33	+31	+29	+21	+35	+38	+32	-5	-6	+57	+58	+16	+7	+11	-9	-49	4	127
Feb.	Nil																									0	
Mar.	+5	-7	-21	-41	-61	-51	-31	+7	+7	+21	+11	+14	+19	-29	-51	-13	-9	+5	-6	+64	+77	+59	+19	+15	-67	2	142
Apr.	-7	-16	+5	-6	+2	-4	+5	-8	-20	-12	-18	-10	-1	-15	+18	+22	+20	+15	+16	+17	+8	-1	-6	-3	+7	7	117
May	+143	+209	+65	-106	+131	+57	-12	-53	-88	-87	-160	-158	-235	-136	-141	-110	-70	-26	+109	+42	+95	+134	+212	+185	+353	1	350
June	+23	+14	+3	+2	+13	+15	+40	+35	+11	-12	-39	-21	-25	-60	-49	-4	-11	-21	-26	-27	+10	+37	+44	+48	+56	5	175
July	-24	-32	-20	-4	+7	+40	+9	+10	+39	+56	-27	-27	-55	-43	+1	+40	-9	-8	+28	+41	-29	-27	+16	+16	+50	8	187
Aug.	+20	+22	-32	-36	-45	-57	-77	-45	-16	-22	-27	-46	+10	-26	-80	-98	+32	+74	+90	+66	+85	+111	+75	+22	-31	3	233
Sept.	-43	-56	-44	-11	+75	+58	+15	+30	+27	+6	0	-35	-37	-43	-41	-14	+21	+39	+38	+38	+28	-7	-16	-29	-81	6	197
Oct.	-30	-11	-15	-24	-21	-26	-22	-12	-28	-26	+26	-1	+5	+21	0	+34	+35	+26	+40	+41	+29	+2	-16	-27	-6	9	88
Nov.	-29	-39	-53	-28	-16	+31	-1	-31	+4	-42	-17	+18	+1	-34	-33	+5	+53	+63	+66	+39	+41	+19	-1	-17	+69	2	141
Dec.	-12	-32	-12	-23	-21	-19	-12	-2	-12	-18	+17	+25	+31	+14	+37	+4	-16	+3	+11	+49	+34	-7	-39	-2	+13	5	105
Year	-1	-8	-14	-30	0	+1	-10	-3	-5	-9	-18	-19	-24	-29	-27	-9	+4	+15	+38	+39	+36	+30	+27	+18	+29	52	169
Winter	-31	-69	-31	-35	-35	-8	-13	0	+5	-9	+10	+24	+18	+5	+14	+14	+11	+20	+45	+49	+30	+6	-10	-9	+11	11	124
Equinox	-19	-23	-19	-21	-1	-6	-8	+4	-3	-3	+5	-8	-3	-17	-19	+7	+17	+21	+22	+40	+35	+13	-5	-11	-37	24	136
Summer	+41	+53	+4	-36	+27	+14	-10	-13	-13	-16	-63	-63	-76	-66	-67	-43	-15	+5	+50	+31	+40	+64	+87	+68	+107	17	236

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation of 0a, 1a, 2a days see p. 16, *Observatories' Year Book, 1938*.

† See p. 10, *Observatories' Year Book, 1938*.

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	0·5	2c	17·8	1b	0·4	0a	···	0a	···	0a	···
2	0a	···	1b	1·5	(0a)	···	0a	···	0a	···	0a	···
3	1a	0·6	1c	1·3	2b	4·0	1a	0·1	0a	···	0a	···
4	0a	···	0a	···	2b	9·7	1b	2·1	1b	2·1	1a	0·3
5	0a	···	2c	5·9	1c	1·8	1a	0·1	1b	0·8	0a	···
6	1a	0·9	2c	4·5	2c	9·1	0b	···	1b	0·6	0a	···
7	1a	2·7	2b	6·5	1a	0·1	0a	···	1b	2·0	0a	···
8	0a	···	2b	4·6	0a	···	0a	···	2b	4·3	0a	···
9	1a	0·2	1c	1·1	1a	0·2	1a	0·2	1b	0·8	0a	···
10	0a	···	1b	1·5	0a	···	2b	7·0	0a	···	1b	0·5
11	0a	···	0a	···	0a	···	1b	2·8	0a	···	1b	1·1
12	2c	3·5	0a	···	0a	···	2b	4·3	0a	···	2b	5·7
13	1b	1·1	0a	···	0a	···	2c	7·1	1b	0·2	0a	···
14	1c	2·1	(1a)	-	0a	···	1a	1·9	1c	2·9	2b	3·9
15	1c	0·9	(2b)	-	0a	···	1b	0·6	1c	2·1	0a	···
16	2c	3·4	1b	1·2	0a	···	2c	5·3	2c	3·2	1b	0·6
17	2c	3·5	1b	0·8	0a	···	1b	2·3	2b	3·7	0a	···
18	1c	1·0	1b	1·8	0a	···	1a	0·5	2b	5·5	1a	0·1
19	1b	0·5	0a	···	1b	0·7	1a	0·1	1b	2·2	1a	0·1
20	1b	0·5	1b	0·6	2c	8·8	1b	2·0	0a	···	0a	···
21	1b	0·4	1b	0·9	1c	2·0	1b	1·1	1b	0·8	1b	0·3
22	1b	0·1	2c	3·1	1b	1·0	1a	0·6	1b	0·1	1a	0·2
23	0a	···	1c	1·3	1c	0·9	0a	···	2b	3·6	2c	4·3
24	0a	···	1b	1·4	0a	···	0a	···	2c	3·0	0b	···
25	1b	0·9	1b	1·7	1b	0·3	0a	···	1a	0·3	0a	···
26	1b	0·4	1b	0·4	0a	···	0a	···	2c	5·1	0a	···
27	1b	0·7	2c	3·6	1b	0·7	0b	···	2b	6·6	(1b)	-
28	0a	···	1b	0·7	1b	0·4	0a	···	0a	···	(0a)	···
29	0a	···			1c	2·4	0a	···	0a	···	0a	···
30	0a	···			1b	1·0	0a	···	0a	···	1a	0·3
31	1b	0·1			0a	···			0a	···		
Total	23	24·0	31	62·2	21	43·5	21	38·1	28	49·9	16	17·4
No. of days used	31	31	28	26	31	31	30	30	31	31	30	29
Mean	0·74	0·8	1·11	2·4	0·68	1·4	0·70	1·3	0·90	1·6	0·53	0·6

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0a	···	0a	···	1b	2·5	1a	0·1	0a	···	1b	0·5
2	1a	0·5	0a	···	0a	···	0a	···	0a	···	2b	4·5
3	1a	1·1	0a	···	1a	0·1	0a	···	0a	···	1b	0·1
4	1b	1·0	2b	5·2	0a	···	0a	···	1b	0·2	1b	0·6
5	1a	1·0	2b	4·5	0a	···	0a	···	2c	7·4	2c	3·7
6	1b	1·0	1b	1·5	1b	0·5	1b	1·5	2c	3·2	2c	7·2
7	1a	0·1	1b	1·4	0a	···	1b	0·7	1c	2·4	1c	2·8
8	0a	···	1b	2·1	1b	1·5	2a	3·4	(1b)	-	(1b)	-
9	0a	···	1b	0·2	1b	1·4	1a	0·3	0a	···	(1b)	-
10	1b	0·1	1b	2·3	1b	1·9	1b	0·7	0a	···	2b	3·1
11	1b	0·3	1b	0·9	0a	···	1b	1·1	(1a)	-	1a	0·3
12	1b	2·0	1a	0·1	0a	···	1a	0·7	2c	13·2	1c	2·4
13	0a	···	1b	1·8	2b	4·5	1a	0·7	2c	14·0	1c	2·7
14	0a	···	1a	1·3	0a	···	1a	2·8	2b	3·3	2c	4·5
15	0b	···	0a	···	0a	···	1b	0·8	(1a)	-	1c	1·5
16	1b	0·3	1b	0·9	0a	···	2c	5·7	1c	2·2	1c	1·7
17	1a	0·9	1a	0·1	0a	···	1c	2·0	2b	3·5	1a	0·4
18	2c	5·8	1b	2·0	0a	···	1c	1·7	0a	···	1a	0·7
19	2b	3·7	0a	···	0a	···	2c	3·7	1b	1·0	1b	2·1
20	1b	0·6	0a	···	(0a)	···	1b	1·9	1b	2·7	1a	0·5
21	1b	2·6	1b	1·6	0a	···	1c	1·7	1b	2·1	1a	1·1
22	1a	0·3	1b	0·6	0a	···	1b	1·7	0a	···	1c	2·7
23	2a	3·2	0a	···	0a	···	0a	···	2c	4·9	2b	7·7
24	0a	···	0a	···	1a	0·1	0a	···	1b	1·9	1b	2·9
25	0a	···	1b	2·3	0a	···	1a	0·2	1b	0·8	1b	1·9
26	1b	0·6	1b	2·6	1a	0·5	1a	0·1	1a	1·7	1b	0·4
27	0a	···	0a	···	1a	0·1	1b	2·7	2b	7·2	0a	···
28	1a	0·3	0a	···	1a	0·1	1c	1·7	1b	0·5	1b	0·3
29	1b	0·9	0a	···	2b	5·1	(0a)	···	0a	···	0a	···
30	0a	···	0a	···	1a	0·1	1a	2·8	0a	···	(1a)	-
31	0a	···	0a	···			1b	1·0			(0a)	···
Total	23	26·3	20	31·4	15	18·4	27	39·7	29	72·2	34	56·3
No. of days used	31	31	31	31	30	30	31	31	30	27	31	28
Mean	0·74	0·8	0·65	1·0	0·50	0·6	0·87	1·3	0·97	2·7	1·10	2·1

Annual values: Character frequency 0 1 2
No. of days used 131 180 54

Mean character figure 0·79 (365 days)

Duration: Total 479·4 hr.
No. of days 356
Mean 1·35 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

4 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	387	384	383	388	395	388	393	397	397	392	388	384	381	392	391	371	396	399	391	387	416	369	378	380	389
2	374	379	393	385	392	397	397	397	394	393	391	386	379	376	387	391	390	393	394	397	399	398	400	391	391
3	392	394	394	394	397	399	399	400	400	400	399	392	391	394	399	404	404	405	405	404	416	399	394	398	399
4	398	383	387	385	392	408	408	409	400	388	376	377	379	378	383	385	388	394	399	401	400	400	397	399	392
5 q	397	397	398	400	403	404	407	408	409	409	406	402	396	396	400	395	406	410	418	418	419	417	412	409	*406*
6	400	389	348	347	350	379	381	406	400	395	391	384	384	393	392	396	405	399	399	400	394	394	390	391	388
7	388	386	382	389	394	394	395	399	391	392	397	395	394	396	396	406	391	422	402	377	387	389	389	375	393
8	378	382	380	382	385	388	388	393	388	386	385	386	393	397	395	396	398	398	399	400	400	402	391	382	391
9	382	382	391	387	397	400	410	391	384	382	383	380	383	375	374	382	394	400	396	380	388	387	390	392	388
10	409	387	387	387	388	395	395	395	391	391	386	386	391	383	386	391	392	396	398	388	384	399	387	388	391
11	394	387	387	388	393	397	395	397	397	391	382	379	387	378	383	391	395	400	396	387	389	389	388	376	389
12	388	385	387	388	398	395	395	398	392	392	388	388	388	386	386	399	399	398	398	401	399	402	404	384	393
13	371	394	397	397	395	393	394	394	398	397	392	395	394	396	398	400	403	407	403	400	399	404	390	393	396
14 q	392	393	392	394	397	399	397	396	397	396	394	395	398	401	403	401	401	402	405	400	401	400	391	377	397
15 q	387	396	396	394	397	397	397	406	408	409	405	402	400	402	407	403	400	402	400	403	402	401	402	400	401
16	399	402	400	405	407	409	410	407	411	407	399	389	387	393	399	387	384	393	390	390	394	399	403	400	399
17 d	363	241	348	387	392	402	407	393	379	384	390	391	395	393	378	398	572	487	398	406	398	291	337	305	385
18 d	344	367	362	326	378	390	384	382	387	385	368	385	387	393	391	393	381	373	405	373	366	381	380	400	*378*
19	386	378	376	372	372	375	396	396	381	377	375	372	382	385	377	392	396	381	380	391	394	407	391	381	384
20	372	377	366	379	389	394	391	388	387	379	383	380	382	389	392	395	397	399	401	404	399	417	395	398	390
21 q	399	399	397	398	406	408	409	407	403	396	391	390	392	396	398	399	399	400	400	399	398	403	399	397	399
22	397	399	399	405	408	408	407	407	402	403	402	399	401	406	408	406	409	406	399	392	382	423	403	393	403
23 d	394	396	392	399	402	403	405	407	391	373	385	382	378	383	406	419	453	466	397	376	381	367	362	349	394
24 d	375	386	388	390	385	373	392	387	396	383	375	378	386	408	409	411	453	407	384	390	386	408	367	369	391
25 d	367	357	377	365	343	390	388	384	385	381	352	373	385	378	379	397	395	391	389	400	388	392	389	394	381
26	251	362	375	385	391	397	387	397	392	387	375	383	374	387	396	410	382	398	396	393	385	432	393	392	384
27	394	392	390	393	399	407	406	394	393	389	372	379	384	390	400	402	396	393	396	408	397	389	405	408	395
28	381	378	386	394	400	401	405	405	399	383	379	378	385	385	397	396	400	396	397	424	395	403	388	392	394
29	387	389	393	396	399	400	402	399	390	386	380	378	384	390	392	395	400	394	398	401	400	401	399	411	394
30	404	392	396	388	377	395	404	404	391	386	380	378	375	382	388	387	391	392	400	384	390	394	402	393	391
31 q	392	391	391	393	396	399	403	395	389	386	384	386	390	391	394	393	398	400	401	400	399	400	399	401	395
Mean	382	*381*	385	386	391	396	398	398	394	390	386	386	387	390	393	396	*405*	403	398	396	395	395	391	388	392

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −14γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

·5 LERWICK (D) — 12° + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·1	9·9	11·3	11·5	10·8	10·8	11·6	10·8	10·7	11·0	11·0	11·2	12·9	14·8	14·0	10·1	18·4	12·3	10·2	2·0	−3·8	1·5	7·3	8·0	9·9
2	5·8	6·2	12·1	8·8	8·8	9·8	9·9	9·8	10·2	11·0	11·3	12·9	13·8	14·7	12·0	11·1	9·0	10·9	11·2	11·2	11·0	9·2	6·1	8·0	10·2
3	8·6	9·7	10·2	11·1	10·7	10·6	10·3	10·2	10·0	10·2	10·1	10·6	12·1	13·5	12·6	12·4	13·1	13·4	13·1	8·1	8·7	8·9	8·5	1·0	10·3
4	−4·8	4·0	6·9	9·0	8·7	9·0	10·1	11·2	10·8	10·5	10·8	11·4	14·2	14·6	14·0	14·2	12·9	11·7	11·0	11·0	10·3	9·7	9·6	9·9	10·0
5 q	10·2	10·6	10·7	10·5	10·7	10·8	10·9	11·1	11·5	11·8	12·3	13·7	13·7	13·8	14·3	14·1	12·9	12·8	12·8	12·1	12·1	11·2	11·0	9·7	11·9
6	7·3	9·6	5·2	−5·9	−7·9	−2·7	4·9	12·1	13·2	11·1	11·2	12·6	12·7	12·9	12·2	12·4	13·1	13·5	13·0	13·1	10·7	10·4	10·0	10·0	*8·9*
7	9·3	7·8	8·0	7·3	8·3	8·9	9·4	10·4	10·7	13·0	11·9	12·9	14·0	13·6	12·8	14·1	13·3	5·5	14·5	10·5	9·3	9·8	9·9	7·0	10·5
8	6·2	9·2	8·4	8·1	8·0	8·0	8·5	10·1	11·0	12·4	12·9	13·7	15·0	13·0	11·9	12·4	12·1	12·8	13·8	14·0	11·3	4·3	4·0	5·3	10·3
9	6·8	9·1	5·7	6·2	8·3	9·1	10·6	11·3	13·1	14·3	13·9	15·5	20·1	19·1	20·9	14·0	11·0	11·1	11·2	4·9	8·3	9·3	11·1	11·1	11·5
10	9·5	4·3	6·4	8·9	9·3	9·8	9·2	10·0	9·6	11·0	12·2	14·1	14·8	14·0	14·4	13·1	12·4	9·7	11·4	8·2	9·1	12·2	9·9	5·2	10·4
11	5·4	−1·7	1·7	6·5	8·5	8·5	9·1	9·3	9·6	10·8	12·0	13·9	16·2	17·1	14·2	13·6	11·8	12·6	13·1	10·0	12·2	11·1	5·2	7·7	9·9
12	6·2	6·3	6·0	8·3	8·2	8·8	9·9	9·3	9·3	10·4	11·5	12·2	12·8	14·5	14·1	14·3	14·1	12·0	11·7	12·0	10·2	7·1	6·9	4·6	10·0
13	9·8	4·1	7·0	8·0	9·3	10·0	9·6	9·2	8·7	10·0	9·6	12·0	13·8	13·8	12·5	11·7	11·8	13·0	13·1	13·3	12·1	8·5	10·3	8·1	10·4
14 q	8·5	9·0	8·0	10·5	9·3	9·3	8·7	9·0	9·3	10·1	10·9	11·9	12·9	12·8	11·6	11·4	11·0	10·7	11·4	11·4	11·4	10·1	6·3	6·7	10·1
15 q	6·4	5·1	4·1	6·0	7·5	8·5	8·8	9·6	9·9	10·9	12·4	13·1	12·9	13·4	12·9	12·9	12·6	12·0	11·1	10·7	10·5	10·2	9·6	9·8	10·0
16	10·2	9·3	11·0	11·1	11·3	11·1	10·6	11·2	12·6	12·4	11·9	12·4	14·1	16·9	18·3	21·0	15·3	12·6	11·1	10·0	9·5	9·5	9·2	9·0	*12·1*
17 d	5·0	10·1	−12·0	6·7	9·8	10·2	10·9	14·6	19·8	20·8	14·8	14·9	16·4	19·8	15·2	18·8	9·6	−8·7	10·9	7·6	5·9	3·5	−8·5	9·3	9·4
18 d	15·2	10·1	9·0	14·6	14·1	14·1	15·3	12·4	11·2	12·4	9·8	11·9	12·8	12·9	12·1	11·9	8·4	−1·6	3·5	−19·3	5·8	7·3	10·1	10·5	9·4
19	11·1	6·3	6·4	6·4	9·9	12·0	12·7	11·9	11·0	10·9	12·5	10·8	12·3	16·5	10·0	13·2	10·9	0·1	10·7	10·4	8·6	−3·1	3·0	14·8	9·6
20	4·2	6·4	12·4	13·0	11·7	10·1	10·0	8·3	9·2	10·7	13·2	13·1	12·1	12·8	11·5	10·7	10·4	10·3	10·4	11·0	9·9	1·9	7·4	8·6	10·0
21 q	9·1	9·8	8·3	11·3	7·9	7·8	8·6	8·9	9·3	10·2	11·2	12·0	12·8	12·1	11·3	11·1	10·6	11·0	11·1	10·8	8·3	6·9	8·9	9·3	9·9
22	10·1	11·0	9·8	10·6	9·7	9·4	9·8	10·2	12·0	12·8	14·0	14·0	14·4	14·1	13·0	12·1	13·1	13·1	13·0	1·9	1·9	1·3	5·9	10·1	10·3
23 d	12·4	15·9	8·9	7·3	7·7	9·1	9·9	10·1	11·2	15·0	14·1	14·1	15·6	18·4	15·8	18·4	11·9	7·2	1·8	12·0	9·1	1·1	1·9	5·2	10·6
24 d	7·3	6·8	9·3	10·2	8·9	6·0	11·6	16·0	12·1	13·9	14·2	15·4	17·1	11·9	19·3	15·1	10·2	−1·8	10·2	6·9	1·9	6·8	5·0	7·7	10·1
25 d	14·2	16·3	11·9	10·0	21·0	15·0	8·5	11·9	7·9	11·1	11·4	12·0	14·5	13·8	9·2	14·0	4·0	11·8	7·0	0·4	4·8	9·0	6·1	−4·8	10·0
26	−0·9	−1·7	9·0	9·2	10·0	10·1	15·0	13·1	14·1	10·5	12·2	12·0	13·1	15·1	11·9	16·2	14·9	11·3	11·8	10·2	6·0	−6·8	4·2	6·2	9·4
27	9·9	11·2	10·7	10·0	7·9	8·0	10·2	11·2	11·5	11·3	11·1	12·2	14·0	15·9	8·0	13·3	7·9	4·9	7·1	−1·4	4·0	6·4	3·2	7·0	9·0
28	7·2	9·6	12·3	12·2	11·9	11·0	10·5	10·3	10·1	10·9	12·8	13·7	16·4	15·0	15·0	11·9	9·1	11·1	8·3	−2·6	2·9	11·1	6·2	10·1	10·3
29	9·7	11·2	11·0	10·1	9·1	9·3	8·7	8·8	8·6	9·8	11·2	13·1	12·1	12·4	11·7	10·3	10·1	9·4	10·1	10·6	9·9	9·2	9·3	4·3	10·0
30	1·1	8·1	8·9	8·1	12·3	7·6	8·3	9·7	9·8	10·8	12·6	15·1	15·0	15·1	15·7	16·8	14·4	11·1	1·9	3·8	10·1	8·9	2·4	9·1	9·9
31 q	11·1	10·2	9·2	10·0	10·2	9·8	9·2	8·9	10·1	12·0	12·6	12·4	12·2	12·3	12·1	10·5	10·2	11·0	11·5	10·8	9·9	9·4	9·1	8·6	10·6
Mean	7·8	8·2	8·0	8·9	9·4	9·3	10·0	10·7	10·9	11·7	12·1	12·9	14·1	*14·5*	13·4	13·5	11·6	9·3	10·4	7·6	8·1	7·0	*6·7*	7·6	10·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

6 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	877	883	882	875	874	882	884	887	885	884	882	882	878	886	904	944	985	962	919	917	902	891	886	879	897
2	872	880	876	878	886	886	886	887	887	886	887	887	888	894	901	897	901	894	892	891	890	891	890	891	888
3	889	885	883	884	886	885	886	886	883	883	882	883	882	882	885	884	885	886	890	895	882	886	892	896	886
4	889	887	884	885	887	883	882	881	884	890	893	893	890	890	891	893	895	896	894	892	891	890	889	887	889
5 q	885	881	879	880	879	880	881	882	880	880	882	884	886	886	885	886	883	882	879	880	880	882	885	885	882
6	888	847	796	786	767	814	854	856	866	877	888	893	893	888	888	886	885	887	887	893	896	895	895	895	*867*
7	895	891	889	888	883	884	884	882	883	878	883	891	892	891	890	891	932	1005	1021	977	929	908	902	907	*907*
8	912	903	900	897	884	885	885	881	884	888	893	893	890	887	889	889	889	891	894	896	899	903	883	883	892
9	889	893	900	894	887	884	878	883	886	885	884	891	896	912	943	928	907	896	898	912	898	898	898	901	898
10	892	877	878	885	886	884	883	883	886	886	890	892	891	893	896	894	894	895	889	897	900	888	877	894	889
11	894	882	879	882	879	880	882	882	882	885	888	888	892	899	903	899	895	893	903	919	917	910	907	907	894
12	899	894	888	886	884	883	881	879	881	883	887	887	889	893	900	895	893	896	895	891	891	891	885	891	889
13	885	872	880	879	879	879	880	880	878	877	878	878	879	883	885	885	884	885	886	889	896	900	892	891	883
14 q	890	887	886	885	883	882	880	878	876	875	877	878	879	882	883	885	885	883	881	884	882	884	897	903	884
15 q	900	892	887	879	878	878	878	876	875	871	871	874	877	879	881	884	885	884	884	881	879	878	877	876	880
16	876	871	876	876	877	877	877	876	870	870	873	878	881	884	894	919	916	897	889	886	883	878	875	875	882
17 d	851	751	781	829	854	863	866	871	867	853	860	866	870	883	894	930	1047	1061	984	964	965	846	844	796	883
18 d	770	820	850	848	852	867	877	887	888	887	894	896	895	898	898	906	925	967	975	936	902	887	855	804	883
19	787	838	860	868	878	879	879	881	891	897	895	902	896	897	918	919	931	941	911	895	892	882	863	822	884
20	837	858	858	853	869	876	885	893	893	892	886	888	890	890	887	887	886	886	887	886	890	867	850	868	878
21 q	877	880	876	871	871	875	875	877	880	883	886	886	884	883	881	880	881	882	883	886	889	887	885	884	881
22	883	880	878	874	875	876	877	877	876	877	879	884	884	883	881	878	880	883	890	923	918	861	861	872	881
23 d	867	842	861	864	869	871	871	871	878	883	885	892	895	914	929	975	1056	1061	971	914	902	903	881	816	903
24 d	812	852	863	868	866	867	857	855	872	888	896	908	936	976	941	933	1043	1010	974	962	917	839	857	872	903
25 d	851	835	848	855	817	810	856	870	884	889	904	901	899	908	912	921	945	910	911	901	904	898	883	839	881
26	750	807	856	871	876	874	875	861	868	872	885	898	904	911	914	911	912	905	894	893	909	870	868	868	877
27	876	870	858	861	871	871	869	875	878	880	888	893	891	900	919	917	943	929	930	913	884	883	872	860	889
28	857	863	863	872	875	880	879	878	879	882	883	884	891	899	902	902	902	899	897	880	877	864	867	865	881
29	859	861	870	879	884	884	884	884	886	886	887	885	887	887	888	892	893	897	891	887	887	883	883	864	883
30	867	872	875	876	854	853	867	871	877	876	876	877	884	898	911	919	935	942	930	906	897	895	883	873	888
31 q	866	869	878	883	884	885	884	886	885	880	879	880	880	884	886	889	888	888	887	888	887	884	883	880	883
Mean	866	*865*	869	871	871	873	877	878	880	881	885	887	889	895	899	904	919	*919*	910	904	898	885	880	872	887

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −14γ

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

7 LERWICK — JANUARY 1941

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A
1	20 24	450	354	21 23	96	16 11	23·3	-20·3	20 14	43·6	16 24	1007	870	4 3	137	2,1,2,1,3,4,4,4	21	1	74·7
2	22 10	418	370	0 38	48	2 48	17·8	3·0	22 11	14·8	14 34	903	859	2 47	44	3,2,0,1,2,2,1,2	13	0	74·0
3	20 12	420	386	0 11	34	18 15	14·3	-13·3	23 49	27·6	23 40	903	878	20 57	25	1,0,1,1,1,1,2,4	11	0	73·4
4	6 38	412	366	1 19	46	12 53	15·3	-11·1	0 9	26·4	17 37	897	880	6 50	17	3,2,1,1,0,1,0,0	8	0	73·8
5 q	20 27	422	388	15 38	34	15 14	14·9	8·4	23 48	6·5	15 40	888	*877*	18 40	*11*	0,0,1,1,1,1,1,1	6	0	73·8
6	7 38	415	325	2 42	90	8 7	15·7	-13·8	4 31	29·5	20 58	900	743	4 21	157	4,4,3,2,1,1,2,1	18	1	74·7
7	17 40	451	366	16 48	85	18 1	27·6	-12·5	17 2	40·1	17 41	1046	877	9 52	169	1,1,1,2,1,5,4,2	17	1	75·6
8	21 3	412	371	0 52	41	19 15	16·0	-2·1	21 32	18·1	0 16	915	878	23 14	37	2,1,2,1,1,1,2,3	13	0	75·8
9	6 8	416	364	14 57	52	14 34	26·7	2·2	19 41	24·5	14 53	950	877	6 10	73	2,2,2,2,3,3,3,2	19	1	75·5
10	0 36	436	373	1 44	63	21 52	18·6	1·9	1 3	16·7	0 6	913	872	0 46	41	3,2,1,1,2,2,2,3	16	0	75·3
11	18 20	406	363	23 26	43	13 43	20·0	-4·6	1 28	24·6	19 18	926	875	1 46	51	3,2,1,1,2,1,3,3	16	0	76·0
12	22 23	415	379	23 40	36	16 5	15·8	1·6	21 54	14·2	0 0	902	878	7 22	24	2,1,0,1,1,2,1,3	11	0	76·6
13	21 45	431	358	0 38	73	22 0	17·2	2·1	21 35	15·1	21 27	918	866	1 3	52	3,2,1,1,0,1,2,3	13	0	76·6
14 q	18 24	407	371	23 28	36	13 9	13·3	2·4	22 37	10·9	23 55	908	874	9 15	34	1,0,0,0,0,0,1,3	5	0	76·1
15 q	8 59	412	383	0 0	29	13 4	14·0	1·2	1 52	12·8	0 0	907	870	10 6	37	2,1,2,1,0,0,0,0	6	0	75·1
16	15 8	414	372	15 53	42	15 25	22·4	7·9	23 38	14·5	15 40	930	867	1 8	63	1,0,1,2,2,3,1,1	11	0	74·1
17 d	16 47	*724*	100	1 40	*624*	18 2	*36·4*	-25·1	22 17	61·5	17 11	*1121*	*662*	1 36	*459*	6,2,3,3,3,6,5,5	33	2	73·0
18 d	23 33	472	296	3 35	176	0 29	22·0	*-40·7*	19 18	*62·7*	18 44	1014	746	0 6	268	4,4,2,3,2,4,5,4	28	1	72·4
19	21 26	429	347	14 2	82	23 35	20·2	-12·2	21 24	32·4	17 2	959	779	0 4	180	4,3,2,2,3,4,2,5	25	1	72·4
20	21 44	461	358	2 53	103	2 52	14·6	-6·9	21 43	21·5	9 4	894	819	0 4	75	3,2,2,2,1,0,2,3	15	0	72·1
21 q	4 17	417	389	11 4	*28*	3 23	13·5	1·6	21 0	11·9	21 10	893	865	4 19	28	1,2,1,0,0,0,2,2	8	0	72·2
22	21 15	450	369	20 23	81	13 12	15·3	-6·3	19 47	21·6	19 38	940	845	21 27	95	1,1,2,1,1,1,4,3	14	0	72·5
23 d	17 58	577	327	24 0	250	15 52	24·4	-12·2	18 19	36·6	17 13	1106	777	24 0	329	3,1,1,2,3,5,4,4	23	1	73·0
24 d	16 42	497	322	0 3	175	14 23	26·5	-11·6	21 2	38·1	16 45	1101	777	0 0	324	4,2,3,2,4,5,4,4	28	1	73·6
25 d	23 38	423	305	4 18	118	4 41	23·4	-15·3	23 52	38·7	16 9	961	797	4 58	164	3,4,3,3,3,4,3,4	27	1	73·8
26	21 22	455	*87*	0 17	368	6 49	19·3	-20·4	21 17	39·7	13 53	923	698	0 24	225	5,2,2,3,3,3,2,4	24	1	73·8
27	22 58	436	352	10 39	*84*	13 37	20·9	-9·3	17 0	30·2	16 37	954	828	23 20	126	2,2,2,3,3,4,4,3	23	1	73·7
28	19 21	441	366	1 51	75	12 59	18·8	-13·8	19 9	32·6	14 23	906	838	0 0	68	2,1,1,2,2,2,4,2	16	1	73·6
29	23 35	429	370	11 43	59	1 52	14·2	-1·3	23 53	15·5	17 20	900	849	23 37	51	2,1,1,1,1,2,0,3	11	0	73·6
30	18 27	416	365	4 14	51	16 2	18·2	-6·3	18 52	24·5	17 15	950	843	4 50	107	3,2,1,1,2,3,4,3	19	0	73·7
31 q	18 18	407	379	9 51	*28*	0 48	13·5	8·0	23 7	*5·5*	15 45	890	862	1 7	28	2,0,1,1,1,0,1,0	6	0	74·0
Mean	— —	444	343	— —	102	— —	19·2	-7·1	— —	26·2	— —	946	833	— —	113	—	—	0·45	74·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

8 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	397	398	399	399	401	399	398	399	398	395	393	393	387	392	396	405	401	391	392	388	387	390	395	397	395
2	393	395	395	395	396	398	397	396	390	381	383	387	386	391	392	395	396	405	408	395	402	386	390	390	393
3	388	390	384	406	406	399	404	392	349	333	354	372	369	372	364	390	392	407	417	378	375	390	393	390	384
4	380	391	375	381	384	388	394	389	392	383	376	379	384	381	389	390	397	399	388	394	394	392	391	389	387
5	391	397	386	388	396	393	392	403	400	392	389	387	391	392	398	391	402	411	406	409	412	393	382	367	395
6	373	369	357	372	382	384	372	386	387	380	356	362	367	385	384	402	393	397	409	407	390	386	390	373	382
7 d	333	356	377	384	378	371	387	394	377	370	369	378	381	385	379	387	400	416	398	386	417	390	398	404	384
8	402	385	384	376	378	396	397	397	386	376	370	358	370	384	392	396	399	399	396	396	395	404	384	396	388
9	393	381	384	366	381	402	384	391	395	392	385	390	391	396	398	389	396	400	402	393	396	381	389	396	390
10	385	365	390	397	397	398	390	397	390	390	394	389	384	390	393	397	396	399	405	400	404	394	392	398	393
11 q	400	396	392	393	393	394	395	392	397	396	396	396	397	390	392	396	405	405	403	401	383	387	387	387	395
12 q	390	393	390	387	393	392	395	396	397	393	393	397	395	393	396	394	400	405	404	401	396	392	390	391	395
13 d	386	384	395	400	407	415	421	417	397	375	369	400	399	382	376	393	409	403	404	395	388	371	376	348	392
14	336	314	393	383	389	394	392	398	385	378	347	376	391	395	392	393	410	408	405	405	403	404	398	401	387
15	354	392	387	369	333	371	405	405	394	377	353	377	386	384	403	399	407	405	408	400	386	392	401	395	387
16	395	392	360	382	402	403	400	397	399	393	385	384	381	387	392	391	397	401	393	398	396	395	391	388	392
17	395	393	395	390	386	395	398	406	396	383	359	370	370	379	387	398	397	408	396	395	416	389	395	400	391
18 q	401	395	395	393	396	402	400	400	397	381	383	377	378	383	387	386	395	399	393	398	392	397	401	404	393
19	403	398	398	400	401	398	398	397	399	397	392	389	390	386	389	396	405	394	386	394	401	402	401	399	396
20	401	396	398	398	405	408	403	407	400	395	393	394	389	388	385	393	392	400	404	406	405	388	382	360	395
21 d	367	348	321	380	394	396	395	395	392	388	379	378	389	396	420	485	406	401	382	386	420	316	285	323	381
22 d	359	357	358	281	377	403	400	389	393	366	359	371	383	401	412	425	477	390	410	399	380	366	352	362	382
23 d	345	363	350	384	388	395	388	382	389	391	378	385	401	388	373	410	404	428	395	377	368	372	282	266	375
24	384	388	371	348	362	386	392	392	387	375	374	368	371	385	397	416	404	400	412	418	381	393	388	385	387
25	380	397	390	389	385	395	397	389	380	378	371	369	371	381	402	383	403	395	403	398	401	403	399	414	391
26	392	378	344	313	370	392	385	382	387	367	354	367	365	381	392	405	392	392	393	402	401	401	399	399	381
27 q	398	395	393	395	396	397	396	397	390	377	372	377	383	389	396	398	410	397	394	401	405	401	401	399	394
28	400	386	399	397	401	406	403	403	397	379	375	360	376	385	394	401	396	405	401	402	401	405	404	410	395
Mean	383	382	381	380	388	395	396	396	391	381	375	380	383	387	392	400	403	402	400	397	396	389	383	383	389

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −15γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

9 LERWICK (D) — 12° + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	9·5	9·5	9·5	9·4	9·3	8·9	8·6	9·1	9·5	10·7	11·9	12·9	14·8	13·0	13·3	14·9	16·3	19·0	16·9	12·4	12·1	8·6	8·2	7·7	11·5
2	8·4	9·3	9·1	8·2	9·0	9·2	8·7	8·0	7·7	9·5	13·0	14·9	13·2	13·1	12·0	11·0	10·8	11·0	12·2	13·0	12·6	5·3	6·4	8·2	10·2
3	9·5	9·0	3·3	4·3	-7·4	0·3	5·0	9·1	10·1	12·1	10·8	11·9	16·2	19·9	17·5	13·9	11·7	12·6	7·8	8·3	6·8	3·8	4·6	7·5	8·7
4	6·2	3·4	-0·2	6·4	7·4	6·4	4·9	6·7	7·3	8·4	10·6	13·2	18·7	17·7	17·2	14·0	15·9	16·1	14·3	10·9	9·6	9·2	8·7	8·0	10·0
5	8·2	9·6	6·2	10·5	7·4	6·3	8·1	7·2	8·0	8·9	11·2	13·4	16·0	17·0	19·5	17·4	15·0	14·1	17·1	15·0	7·4	-12·5	-4·1	-2·1	9·4
6	-0·3	6·8	0·0	3·8	4·5	7·7	20·0	12·3	9·3	9·3	10·9	16·0	15·0	17·9	16·8	19·7	20·9	18·0	14·1	4·9	1·0	2·7	0·4	2·1	9·7
7 d	-0·7	-8·9	1·2	5·1	2·0	6·9	10·3	14·0	15·8	11·6	10·8	12·1	14·8	18·3	16·0	11·5	11·9	-2·8	5·3	10·9	2·1	6·9	3·5	-2·8	7·3
8	-1·0	3·9	3·7	9·3	10·9	7·2	8·8	9·8	10·6	11·1	13·1	13·0	13·9	14·2	13·1	6·8	9·1	12·1	3·0	6·0	9·7	4·1	6·0	4·5	8·5
9	4·0	7·9	9·7	10·2	10·3	8·7	12·7	17·1	12·0	11·9	10·9	11·6	12·8	14·8	14·9	12·6	10·2	11·1	10·5	2·6	-8·1	3·3	6·2	9·2	9·5
10	7·4	18·1	11·0	6·4	7·2	10·2	10·7	9·8	10·8	10·7	12·1	13·3	14·5	15·1	13·1	13·1	12·9	11·9	13·8	15·0	12·8	6·1	10·1	6·9	11·4
11 q	6·7	6·0	7·0	8·2	7·9	8·7	10·8	9·8	10·3	11·3	12·7	13·9	14·0	13·1	14·2	13·2	14·4	14·9	12·3	7·9	9·3	8·3	9·0	5·3	10·4
12 q	4·3	4·2	4·4	6·3	6·6	7·5	7·6	8·6	9·4	10·6	12·2	11·8	12·2	12·2	12·9	11·0	10·2	11·0	10·9	9·3	9·0	8·3	6·3	6·7	8·9
13 d	10·3	5·5	6·3	6·7	6·7	8·6	9·2	10·1	11·2	15·2	20·2	18·4	19·1	22·6	16·3	14·0	12·7	5·3	3·9	11·9	2·8	-4·9	-5·8	3·2	9·6
14	14·4	20·8	4·1	-0·4	4·9	6·4	6·9	9·3	12·1	12·0	10·4	9·8	11·7	13·9	12·1	7·0	6·3	10·5	10·7	7·2	8·6	8·4	8·0	6·7	9·2
15	14·2	3·9	-3·1	5·3	11·0	11·9	12·8	12·4	11·1	13·0	15·9	14·1	15·2	14·5	16·0	10·0	7·9	4·2	0·3	-2·6	5·9	8·0	10·1	7·1	9·1
16	8·4	8·8	7·5	15·6	5·2	8·1	8·9	8·8	9·1	9·5	10·2	11·4	11·5	12·5	13·5	13·0	11·8	11·0	10·0	11·2	9·0	9·6	8·9	4·7	9·9
17	9·2	12·1	7·8	2·1	4·7	7·9	8·8	8·8	11·0	11·1	10·8	10·8	12·1	12·9	12·8	10·9	10·2	9·8	7·0	-6·8	0·0	4·3	8·5	7·6	8·1
18 q	7·0	8·2	6·0	6·1	8·2	9·1	10·4	10·7	10·0	10·8	11·6	12·1	12·1	12·3	11·9	11·5	11·0	10·2	10·0	5·3	8·0	9·0	8·3	8·2	9·5
19	8·2	8·7	8·7	8·6	8·7	8·7	8·7	8·6	9·1	9·8	10·9	10·4	10·9	12·1	12·1	12·1	11·8	4·5	12·6	10·9	10·3	10·0	9·6	9·0	9·8
20	8·3	8·3	9·1	9·0	9·1	8·6	8·3	9·3	10·3	12·6	15·1	14·9	14·8	12·8	12·2	13·7	12·6	12·5	11·9	12·1	9·3	-3·3	-6·7	0·4	9·4
21 d	8·0	3·2	7·4	10·0	6·3	9·3	8·7	8·4	9·4	11·0	12·0	12·1	15·0	19·1	13·9	13·1	5·9	11·0	6·4	7·6	4·3	-5·9	1·0	5·6	8·5
22 d	10·9	9·7	6·3	15·1	13·7	6·3	10·3	9·4	8·5	10·2	11·0	14·0	14·1	10·7	17·9	9·3	-12·7	4·3	11·0	-3·9	3·5	5·3	2·4	-2·8	7·7
23 d	10·1	10·0	17·3	8·9	8·8	10·9	11·5	12·2	12·2	10·7	9·9	11·4	15·0	15·1	12·4	11·8	5·3	-1·4	-15·0	2·3	5·1	0·9	-6·7	5·0	7·7
24	6·3	8·4	10·2	12·1	12·0	9·8	9·3	10·2	11·1	12·1	12·6	12·2	12·3	14·8	12·3	10·1	-6·6	8·0	2·8	0·2	6·5	7·2	8·2	12·2	8·9
25	9·3	13·6	8·0	7·7	7·2	8·1	7·7	7·5	8·9	11·2	12·3	13·9	13·9	13·1	9·8	10·7	11·0	9·2	-2·7	6·4	2·8	3·5	13·5	5·7	8·8
26	6·9	6·9	12·0	11·2	9·4	3·4	6·9	6·9	10·0	11·2	10·4	13·0	12·6	14·9	11·0	10·0	10·3	8·2	5·3	6·2	8·3	8·5	8·4	8·4	9·2
27 q	8·1	8·2	8·4	8·5	8·2	8·2	8·1	7·1	7·5	8·0	9·4	11·1	12·6	12·2	11·1	9·4	7·6	2·7	7·5	9·8	9·9	9·2	8·2	8·3	8·7
28	9·0	11·1	7·1	7·3	7·0	6·6	6·8	6·0	6·3	6·4	10·7	12·8	15·4	15·9	15·2	14·3	10·6	10·2	10·3	9·5	8·1	6·5	6·3	8·0	9·5
Mean	7·5	8·1	6·7	7·9	7·4	7·9	9·3	9·5	9·9	10·7	11·9	12·9	14·1	14·8	14·0	12·1	9·8	9·6	8·2	7·3	6·7	4·7	5·3	5·7	9·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

10 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	883	884	884	884	884	885	885	883	880	879	880	886	885	884	886	894	901	909	919	917	913	902	894	891
2	891	887	885	885	886	886	887	888	886	884	883	885	887	884	883	885	888	889	889	915	961	948	914	898	*895*
3	894	889	876	817	799	829	855	870	888	889	887	894	896	900	902	899	900	913	969	957	945	899	893	888	889
4	886	860	847	859	872	883	882	891	890	890	889	888	887	897	905	911	915	929	933	919	913	907	905	903	894
5	894	872	861	871	874	878	881	878	879	883	884	888	889	893	898	908	904	900	929	940	966	930	892	863	894
6	867	856	835	846	869	862	831	837	866	881	895	896	895	903	921	932	942	931	918	936	932	922	916	880	890
7 d	767	806	846	871	863	834	823	846	857	872	887	894	894	898	912	920	907	907	895	899	886	861	882	886	871
8	864	861	866	859	830	849	867	872	879	885	891	894	895	898	900	917	908	898	905	900	895	864	891	887	882
9	886	881	871	865	852	857	857	855	861	871	874	876	879	885	891	896	895	891	890	903	895	891	897	887	879
10	889	859	850	861	862	867	875	872	876	878	877	881	887	891	894	897	899	896	896	913	922	926	923	913	888
11 q	892	884	887	888	885	879	874	874	874	878	882	886	891	895	897	900	898	898	918	924	923	917	909	903	894
12 q	894	884	882	880	877	879	878	877	875	877	879	882	885	887	892	893	889	886	885	887	894	902	907	900	886
13 d	872	828	868	873	877	873	869	869	874	876	875	871	886	922	942	925	960	1008	957	922	911	893	838	832	893
14	766	720	743	824	851	860	876	879	875	880	903	908	896	896	900	921	924	901	897	898	894	890	886	842	*868*
15	788	783	807	854	825	813	855	867	876	882	890	883	892	897	905	922	917	917	916	927	910	891	876	876	874
16	875	871	860	823	857	870	876	880	879	881	882	883	885	884	886	886	888	892	901	903	909	844	782	823	872
17	841	831	845	854	851	861	874	881	878	884	895	920	914	906	910	912	899	900	916	918	879	887	888	869	884
18 q	865	864	865	871	875	876	879	879	879	884	883	886	889	887	887	886	885	887	893	895	893	889	886	880	882
19	878	879	879	879	879	880	881	882	881	883	884	884	884	882	881	884	898	927	910	895	888	885	885	884	886
20	880	880	878	878	873	870	872	870	873	875	873	878	884	901	895	891	890	885	882	884	920	948	919	855	886
21 d	812	801	767	812	851	864	873	876	878	878	884	887	890	905	958	1013	969	974	934	909	900	868	816	757	878
22 d	829	821	855	810	814	849	857	875	882	891	901	902	922	917	925	943	1011	948	927	946	839	767	777	769	874
23 d	794	820	815	853	876	871	871	886	884	888	895	896	906	933	948	934	950	966	960	939	851	866	789	732	880
24	799	863	878	849	847	865	888	893	892	895	897	912	924	923	935	940	978	925	906	878	886	883	872	828	890
25	831	833	855	876	884	886	884	884	882	882	886	897	906	920	934	918	907	922	942	907	900	863	816	812	884
26	833	860	823	779	811	839	860	872	876	886	890	894	892	896	911	912	902	896	896	887	881	883	882	883	873
27 q	884	886	889	889	888	888	886	885	885	888	884	880	882	887	889	890	895	907	901	888	885	884	884	881	888
28	873	865	863	880	885	884	884	883	882	881	878	882	879	881	884	892	904	900	898	895	894	891	883	863	883
Mean	855	*851*	853	857	861	866	871	875	878	882	886	890	893	898	906	911	*915*	914	913	912	903	890	875	860	884

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −15γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

11 LERWICK — FEBRUARY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	h. m. ′	′	h. m.	γ	γ	h. m.	γ			°A
1 q	15 43	407	378	12 27	29	17 47 20·5	6·7	22 56	13·8	19 38	922	878	10 20	44	0,0,1,1,1,2,2,1	8	0	74·1
2	18 34	412	377	9 41	35	20 42 16·5	4·0	22 3	12·5	20 52	979	881	14 3	98	1,1,0,1,1,1,4,4	13	0	74·3
3	3 34	444	327	9 20	117	13 54 22·9	−10·0	4 20	32·9	18 35	990	781	3 45	209	2,4,3,3,3,2,3,4	24	1	74·1
4	17 10	406	368	2 31	38	18 4 19·8	−3·9	2 14	23·7	18 9	937	841	2 0	96	3,2,2,2,2,2,3,1	17	0	74·0
5	21 0	429	339	23 52	90	13 56 21·2	−19·2	21 15	40·4	20 45	978	845	23 52	133	2,2,2,2,2,3,4,4	21	1	73·7
6	18 47	419	312	2 24	107	6 29 25·7	−8·7	2 28	34·4	16 37	949	809	6 52	140	4,3,4,3,2,2,3,4	25	1	74·0
7 d	20 46	444	283	0 33	161	13 43 21·6	−14·3	1 26	35·9	15 5	931	735	0 29	196	4,4,3,3,3,4,4,4	29	1	74·3
8	0 11	429	348	11 49	81	20 49 16·6	−13·2	0 7	29·8	15 36	923	820	4 28	103	4,3,2,2,2,3,4,3	23	1	74·9
9	20 4	423	352	3 49	71	7 29 19·9	−22·6	20 2	42·5	19 58	911	847	4 20	64	3,3,3,2,1,2,5,3	22	1	75·2
10	18 13	409	348	1 28	61	1 24 21·1	3·1	21 56	18·0	21 10	934	829	2 2	105	3,2,2,2,1,1,2,3	16	0	76·0
11 q	19 12	422	373	20 23	49	18 10 16·5	1·3	19 5	15·2	18 57	937	868	6 53	69	2,1,1,1,2,2,3,2	14	0	76·0
12 q	17 19	408	383	22 23	*25*	14 37 14·5	2·1	0 43	12·4	22 24	912	874	8 55	38	2,1,1,2,2,1,1,2	12	0	75·8
13 d	15 57	439	313	24 0	126	13 12 27·1	−17·5	22 9	44·6	17 25	1040	808	1 10	232	4,2,2,3,4,4,4,5	28	1	75·8
14	16 12	420	280	1 17	140	1 35 26·5	−5·6	3 5	32·1	16 4	942	691	1 40	251	4,4,3,3,2,3,2,3	24	1	76·0
15	14 24	432	310	4 25	122	0 34 25·4	−9·7	19 18	35·1	19 15	939	753	0 45	186	4,4,3,3,3,4,4,2	27	1	76·0
16	21 19	434	327	2 51	107	3 8 24·7	−1·7	21 6	26·4	20 25	914	757	22 29	157	4,4,1,1,1,1,3,4	19	1	76·0
17	20 27	443	343	10 41	100	14 37 16·7	−18·3	19 26	35·0	19 25	931	828	1 37	103	3,2,3,3,3,2,4,3	23	1	76·0
18 q	19 48	410	372	12 0	38	13 58 13·5	−3·0	19 41	16·5	18 50	900	860	1 53	40	2,2,1,2,1,1,3,1	13	0	75·7
19	16 46	410	383	18 26	27	18 22 13·7	−5·2	17 10	18·9	17 6	945	876	0 2	69	1,0,1,2,2,4,2,0	12	0	75·2
20	20 50	422	321	23 39	101	10 14 17·1	−12·5	22 16	29·6	21 17	961	825	23 57	136	1,1,2,2,2,1,3,4	16	1	74·8
21 d	15 49	*656*	232	22 16	*424*	13 32 22·6	−18·5	15 58	41·1	15 48	*1099*	738	2 34	361	4,4,1,2,3,6,4,5	29	1	74·3
22 d	16 24	539	220	3 38	319	21 8 *34·1*	*−39·2*	16 32	*73·3*	16 20	1076	*678*	21 6	*398*	3,5,2,3,3,6,5,5	32	1	74·2
23 d	17 45	483	*168*	23 37	315	2 4 25·4	−29·2	18 30	54·6	17 45	1027	698	23 12	329	4,3,3,2,3,4,5,6	30	1	74·1
24	19 16	449	334	3 16	115	13 16 17·1	−17·3	16 34	34·4	16 32	998	729	0 0	269	5,3,2,3,3,4,4,3	27	1	74·1
25	22 2	451	350	22 54	101	22 43 21·8	−15·8	18 33	37·6	18 29	987	802	23 22	185	3,2,2,2,3,3,4,4	23	1	74·5
26	15 34	421	293	3 28	128	11 36 18·3	0·6	18 12	17·7	14 59	919	759	3 31	160	3,4,2,3,3,2,3,1	21	1	74·7
27 q	16 42	419	369	10 25	50	13 2 13·1	1·1	17 38	*12·0*	17 57	910	879	11 53	*31*	0,0,0,1,1,2,2,0	6	0	74·3
28	23 19	425	347	11 20	78	14 12 16·6	4·5	23 58	12·1	16 37	908	853	2 9	55	3,1,1,2,1,2,2,2	14	0	74·5
Mean	− −	439	327	− −	113	− − 20·4	−9·4	− −	29·7	− −	957	805	− −	152	−	−	0·64	74·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

12 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	399	390	387	380	325	363	209	286	271	295	450	388	363	774	465	388	27	224	510	191	425	179	155	274	338
2	382	226	214	280	280	296	299	295	300	343	331	352	351	360	361	376	411	402	374	367	351	292	296	334	328
3	330	292	313	341	327	337	352	346	339	348	357	363	372	378	395	376	418	431	369	364	354	360	363	364	358
4	344	334	333	353	320	311	354	354	351	331	342	337	358	371	428	386	390	402	380	375	365	365	284	247	351
5	276	352	346	253	319	354	366	373	376	370	365	363	361	373	442	399	403	419	415	380	367	287	328	316	358
6	321	334	349	366	370	356	365	354	365	359	334	347	362	372	388	399	411	411	399	372	376	373	376	378	368
7	373	368	367	378	382	387	388	384	373	357	360	361	360	369	380	390	381	384	401	411	399	385	348	368	377
8	370	384	407	375	390	396	390	384	375	363	361	363	357	358	374	385	385	384	391	394	393	399	390	384	381
9	361	337	378	380	382	386	381	378	373	367	360	360	360	368	375	379	385	392	401	406	418	377	361	366	376
10 q	375	362	369	367	388	384	384	391	386	378	373	375	377	384	392	392	392	393	388	395	394	393	401	392	384
11	390	393	375	375	381	378	388	391	388	386	379	379	368	373	373	380	387	403	399	402	402	416	335	366	384
12	385	384	383	387	389	391	394	390	385	379	377	381	386	387	375	369	394	397	405	405	401	396	384	383	388
13	386	379	369	370	380	388	396	395	393	391	388	386	390	399	401	406	398	397	402	414	387	344	365	379	388
14 d	174	-164	153	319	318	346	335	326	378	356	291	313	444	448	390	383	378	385	391	389	394	356	152	322	316
15	372	372	371	352	372	369	370	356	317	334	351	350	360	352	369	378	376	397	385	394	394	399	382	392	369
16 q	379	368	371	380	384	386	386	381	369	356	351	354	365	376	388	389	388	389	390	392	391	392	390	389	379
17 q	389	389	387	383	391	389	386	378	369	364	364	358	364	370	371	381	385	389	391	397	392	393	401	395	382
18	398	396	386	391	390	390	389	387	379	368	362	359	365	373	383	390	391	393	398	400	406	411	364	397	386
19	404	403	404	404	405	405	404	391	382	378	374	386	371	389	433	383	380	397	389	392	396	383	393	393	393
20	304	311	368	349	360	390	389	355	359	359	355	356	366	387	405	419	464	411	395	391	401	428	383	337	377
21	347	375	342	317	367	385	379	357	362	355	360	361	386	391	394	404	413	402	455	428	371	377	368	373	378
22	385	376	296	301	345	346	377	365	364	339	347	369	378	384	380	397	435	463	441	411	385	384	380	355	375
23	380	386	385	384	386	383	389	383	371	365	360	358	373	368	383	398	415	424	380	395	391	431	381	372	385
24	377	380	370	376	383	386	385	380	371	365	362	363	366	373	384	386	387	397	401	406	396	380	398	388	382
25	393	393	386	382	384	389	389	385	378	358	359	367	371	373	379	385	397	398	398	396	396	396	397	393	385
26 q	395	389	393	390	389	391	387	388	383	366	362	364	371	385	387	395	398	398	393	400	401	395	398	395	388
27 q	394	394	393	395	396	398	398	389	377	365	359	357	369	377	383	392	395	397	402	404	410	407	412	415	391
28 d	411	340	341	389	402	417	417	402	390	331	296	342	402	403	489	599	501	578	408	384	308	263	291	273	391
29	250	321	377	362	388	387	369	374	372	361	360	371	376	394	374	415	454	456	500	389	321	184	148	325	359
30 d	275	252	218	246	308	349	383	367	325	342	352	370	383	398	408	414	496	553	572	475	175	141	4	-302	313
31 d	28	-133	158	118	300	325	342	354	333	323	331	332	362	383	380	374	370	385	402	415	407	376	380	392	310
Mean	347	325	345	350	365	373	372	369	363	357	357	361	372	393	394	397	394	408	410	391	380	357	336	340	369

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −12γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

13 LERWICK (D) — 12° + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	3·5	-1·3	4·1	4·3	23·3	11·7	10·4	-12·1	-15·5	-3·9	-3·7	11·4	13·6	0·2	-7·8	-21·1	2·9	78·0	53·5	25·8	7·0	4·6	-0·2	-13·9	7·3
2	6·2	5·9	4·9	-0·6	0·6	-0·2	4·3	4·8	6·2	4·2	8·1	7·3	9·8	10·8	11·1	11·1	10·7	3·4	5·4	-1·1	-4·6	2·2	1·4	-1·2	4·6
3	1·1	7·8	1·2	0·1	6·3	4·2	5·4	7·6	7·7	7·1	8·0	10·0	10·2	11·5	14·8	8·6	4·1	4·7	2·4	-4·4	9·3	8·3	8·7	7·6	6·3
4	7·8	2·3	-1·7	4·3	2·1	7·6	5·3	4·8	6·8	9·1	10·7	11·0	10·8	13·9	19·0	14·5	11·4	5·7	5·9	9·2	6·3	-11·0	-5·4	-4·0	6·1
5	5·5	3·3	1·8	-1·1	-0·2	-0·2	4·2	6·3	8·3	9·3	9·8	11·3	14·6	14·1	13·4	7·3	16·0	11·2	-2·3	0·2	2·6	-11·2	2·2	0·9	5·3
6	6·3	6·2	4·9	5·1	2·0	4·8	4·8	6·0	7·4	9·7	10·2	10·2	11·9	12·4	14·0	14·1	3·4	8·5	7·7	10·3	9·0	9·3	7·9	8·5	8·1
7	7·3	10·4	10·5	8·3	6·7	7·6	7·9	8·1	9·2	12·1	12·2	12·0	13·0	12·9	13·1	13·0	11·8	12·1	12·4	1·2	2·7	5·0	-9·5	6·8	8·6
8	4·2	4·0	2·8	4·5	3·8	4·1	5·7	5·6	5·4	7·0	9·4	12·4	13·3	12 2	13·0	11·0	9·6	8·1	10·4	8·2	1·1	-4·7	0·1	1·4	6·4
9	6·4	10·7	6·4	3·8	4·5	4·2	7·2	8·2	7·6	8·5	10·3	12·7	14·1	14·7	12·6	9·6	8·8	7·7	7·0	1·4	-2·0	4·2	0·7	1·3	7·1
10 q	-1·0	3·7	4·9	0·1	-1·4	0·2	3·7	4·3	5·2	7·2	9·8	12·7	13·9	13·3	11·3	10·1	8·6	8·2	5·9	9·2	9·1	7·4	5·3	8·5	6·7
11	7·5	6·4	1·9	3·6	4·5	5·3	5·0	4·8	6·2	8·6	11·2	14·0	14·1	14·6	13·1	11·0	10·9	10·2	10·1	12·2	5·5	8·2	0·3	3·4	8·0
12	7·7	7·3	7·3	5·9	6·2	6·3	7·0	7·7	8·1	9·2	10·6	12·6	15·4	16·5	17·5	14·2	15·4	14·9	14·5	12·1	10·4	8·5	0·9	-4·2	9·7
13	0·9	7·2	1·8	2·2	2·9	3·9	5·7	7·0	8·2	8·8	9·6	10·7	11·8	11·9	10·7	10·2	10·9	10·4	10·4	10·4	10·0	3·2	-3·7	1·5	6·9
14 d	-20·0	-28·0	-14·6	-7·7	-0·3	8·4	19·6	20·4	19·7	12·6	14·1	17·4	17·5	12·9	14·1	12·0	9·3	3·7	-1·7	-8·7	-14·0	0·0	1·4	7·6	4·0
15	4·7	5·6	6·2	8·0	8·6	7·6	9·5	11·1	14·6	13·1	15·5	14·7	14·5	14·5	11·5	10·8	8·3	8·0	0·5	3·5	8·7	9·2	8·8	8·4	9·4
16 q	5·7	2·2	9·3	7·8	8·3	9·1	7·4	6·8	7·1	8·0	9·8	12·0	12·9	12·4	11·7	10·4	9·2	9·2	9·0	9·6	8·7	8·7	7·6	7·9	8·8
17 q	8·1	8·0	8·1	10·2	6·5	4·7	5·2	6·2	8·2	8·2	10·2	12·9	14·5	15·2	12·1	11·3	9·9	9·5	9·3	8·7	7·0	7·1	5·2	7·3	8·9
18	9·1	13·1	8·7	6·6	6·2	5·6	5·6	5·6	5·8	6·7	9·1	11·9	13·1	13·4	12·6	11·2	10·6	10·2	10·3	11·1	10·5	7·0	5·0	3·0	8·8
19	5·6	8·0	8·1	6·4	6·5	5·4	4·8	5·7	7·3	8·9	12·7	15·6	19·7	21·0	22·4	13·5	14·0	10·8	2·7	7·7	3·2	-0·2	11·4	2·0	9·3
20	11·0	14·0	7·7	8·0	9·6	9·0	8·2	9·2	9·8	9·7	11·9	13·5	15·0	13·0	15·7	14·1	2·5	7·4	9·5	10·2	5·9	6·2	7·4	3·7	9·7
21	15·1	9·3	10·6	12·9	8·0	5·0	4·4	9·7	11·7	12·0	11·3	14·1	14·0	12·9	8·0	11·8	5·0	5·4	-4·0	1·5	-3·7	2·6	8·8	10·7	8·2
22	9·0	7·8	17·3	11·6	8·0	9·8	5·7	7·0	6·5	7·5	9·0	10·0	12·7	11·3	12·6	9·1	-3·6	-5·7	-2·9	-4·7	1·6	7·0	12·1	11·9	7·1
23	8·6	8·2	7·1	6·4	7·4	8·6	7·6	7·5	10·3	9·6	11·2	12·3	15·3	14·7	13·3	10·0	-0·4	2·5	1·3	6·1	9·5	-1·9	10·7	4·4	7·9
24	5·0	6·6	9·4	9·6	6·1	5·8	5·4	5·1	4·7	6·3	8·0	9·9	12·1	13·1	13·3	11·4	8·4	4·1	2·9	2·3	9·0	1·8	1·9	7·0	7·1
25	8·0	7·3	8·1	7·8	8·0	7·4	5·4	5·0	5·1	4·8	8·2	10·4	13·5	14·9	13·5	11·3	9·4	8·3	5·8	1·6	8·4	8·0	5·9	8·8	8·1
26 q	8·8	9·2	8·1	7·2	7·5	7·7	6·8	5·0	4·4	6·2	7·9	10·7	13·5	14·7	13·4	11·2	9·8	8·5	8·4	8·6	9·0	6·8	7·7	8·5	8·7
27 q	8·3	8·1	7·7	7·3	6·8	6·4	5·3	3·7	3·1	4·7	8·4	12·0	14·9	15·0	13·3	11·3	9·2	8·2	8·4	9·2	9·3	9·5	9·4	9·4	8·7
28 d	9·3	-2·1	-16·4	-1·5	4·3	-0·8	2·1	1·2	-0·5	1·1	17·9	21·1	23·8	26·3	24·7	25·2	18·8	20·5	5·4	5·8	-5·9	4·3	-3·4	3·6	7·7
29	3·4	0·9	2·3	0·7	1·0	2·4	5·4	3·8	3·1	5·6	7·7	11·1	15·0	17·2	16·0	17·3	5·2	5·3	9·2	2·2	1·1	6·1	-4·8	2·1	5·8
30 d	2·1	4·8	12·0	-5·2	4·2	8·4	8·3	12·0	9·0	8·0	7·9	8·4	10·8	15·9	14·4	15·5	5·0	5·4	17·5	19·7	-4·4	12·6	-21·5	-63·1	4·5
31 d	12·1	-28·4	-16·1	-12·5	-3·6	1·8	4·3	7·7	5·8	6·4	5·0	6·1	6·4	11·1	11·9	10·1	9·2	9·7	11·2	9·4	0·3	5·1	6·0	3·2	3·4
Mean	5·7	4·1	4·3	4·0	5·3	5·5	6·4	6·3	6·7	7·6	9·7	12·0	13 7	13·8	13·2	11·0	8·5	10·1	7·9	6·4	4·2	4·3	2·8	2·0	7·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

14 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	857	856	865	866	765	668	691	697	834	955	984	978	905	790	440	540	544	307	501	761	905	923	931	920	*770*
2	931	972	917	913	916	912	924	925	925	924	923	924	919	918	920	938	960	963	950	951	879	845	793	853	*916*
3	856	794	817	854	861	867	887	898	900	905	906	918	928	923	925	960	979	941	951	932	915	908	905	903	901
4	850	797	824	868	855	809	818	868	893	910	929	916	906	909	922	990	964	949	937	927	915	846	752	772	880
5	721	804	854	791	826	852	875	888	893	900	903	908	919	923	976	966	950	984	935	931	933	879	781	811	883
6	835	828	841	883	884	887	879	893	900	907	917	918	918	917	919	928	957	973	962	939	925	917	908	902	906
7	897	897	877	888	896	896	897	900	902	903	901	902	902	904	909	914	926	923	921	933	896	902	821	836	898
8	803	861	841	871	883	884	889	896	896	898	897	895	899	903	908	916	925	928	932	949	939	881	868	865	893
9	850	811	831	873	885	886	888	892	898	898	897	898	900	903	904	911	908	906	908	910	873	883	865	777	881
10 q	799	822	819	837	850	871	881	884	886	888	889	892	894	896	897	900	903	907	910	900	899	899	890	889	879
11	872	858	874	888	891	891	886	886	887	886	887	887	891	892	895	896	894	898	908	916	977	940	880	863	893
12	894	910	912	904	901	897	894	892	892	891	890	886	888	901	917	919	909	914	919	927	917	907	910	884	903
13	866	867	880	889	889	886	886	889	890	890	891	890	890	892	897	902	909	912	928	972	927	811	845	851	890
14 d	766	859	751	816	831	841	835	854	886	910	969	975	1002	987	950	967	958	964	957	905	863	850	741	707	881
15	838	884	896	894	883	890	896	903	909	906	907	909	919	916	914	925	925	924	943	920	912	862	822	818	896
16 q	827	843	875	889	892	886	891	895	895	895	895	896	898	901	904	905	905	904	904	903	903	899	898	895	892
17 q	894	896	896	895	892	896	898	899	896	894	891	890	890	895	898	898	901	904	903	903	904	902	890	890	896
18	885	862	876	885	891	894	895	897	897	897	890	885	882	883	887	892	898	899	899	897	895	887	867	809	885
19	870	882	883	886	887	888	889	893	889	885	881	880	902	935	996	968	925	942	948	919	902	866	840	839	900
20	789	759	821	852	845	864	874	879	884	893	904	910	920	940	939	949	1011	972	941	920	899	843	837	821	886
21	765	830	841	810	841	858	872	883	882	889	901	914	923	930	935	919	949	939	920	847	866	871	856	811	877
22	859	876	826	769	812	820	861	889	896	900	906	906	922	924	918	932	968	983	937	891	896	903	873	811	887
23	835	870	888	882	886	888	888	891	890	894	897	899	908	910	911	922	952	955	950	926	912	857	794	815	893
24	862	883	879	877	878	888	890	894	897	899	903	902	901	902	902	914	921	924	915	900	891	876	870	880	894
25	874	874	884	889	887	882	890	890	889	895	894	888	890	894	897	896	896	903	911	912	900	896	889	889	892
26 q	889	891	882	884	884	884	891	892	894	895	892	890	889	891	898	900	903	904	900	895	895	895	891	893	893
27 q	895	896	897	896	896	895	896	897	897	895	890	883	881	887	893	894	896	896	895	892	889	890	889	888	893
28 d	869	755	786	835	867	873	879	887	885	890	882	879	881	937	991	1028	991	991	1024	963	857	745	810	790	887
29	750	792	834	825	879	890	896	904	903	907	905	904	889	910	921	930	977	977	1005	910	814	673	697	762	869
30 d	809	785	718	741	800	835	859	878	884	887	895	918	930	941	967	936	953	1027	1000	945	792	847	732	785	869
31 d	777	782	660	767	739	804	847	868	891	908	925	974	951	911	915	921	922	920	922	931	913	896	896	906	873
Mean	*841*	848	847	859	864	867	876	884	892	900	905	907	908	909	905	915	*922*	917	921	914	897	871	846	843	886

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −12γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

15 LERWICK — MARCH 1941

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A
1 d	13 49	*994*	−184	21 19	1178	18 5	*151·2*	−76·9	16 7	228·1	21 20	1077	*125*	17 59	*952*	2,6,6,6,8,8,9,7	52	2	75·3
2	16 54	466	68	1 59	398	0 44	29·9	−13·7	19 48	43·6	1 52	1024	758	22 19	266	6,3,3,3,2,4,4,5	30	1	75·8
3	17 15	558	262	1 31	296	17 20	23·2	−13·6	19 20	36·8	17 10	1011	776	1 26	235	4,3,2,3,3,5,4,1	25	1	76·0
4	14 31	458	199	23 48	259	24 0	21·0	−36·4	21 22	57·4	15 28	1007	725	22 35	282	4,4,4,4,4,4,3,5	32	1	76·4
5	14 37	472	162	22 0	310	14 23	22·9	−20·4	21 20	43·3	18 2	1039	693	0 12	346	5,5,3,2,4,4,4,5	32	1	76·3
6	18 3	450	279	1 3	171	18 54	18·5	−8·6	18 10	27·1	18 3	1035	822	2 4	213	4,2,2,3,2,4,4,1	22	1	76·4
7	19 54	444	288	22 44	156	15 54	14·6	−15·6	22 50	30·2	19 40	965	780	22 40	185	2,2,1,2,1,2,4,4	18	1	76·3
8	21 3	458	342	21 41	116	14 20	15·1	−18·6	21 1	33·7	20 34	957	782	0 34	175	4,3,1,2,2,2,4,4	22	1	76·0
9	20 1	459	299	1 24	160	13 7	15·1	−13·7	19 52	28·8	19 45	919	753	23 24	166	4,2,2,1,1,2,4,4	20	1	76·2
10 q	22 21	413	349	0 50	64	12 0	14·7	−5·8	0 56	20·5	18 8	916	776	0 0	140	3,3,2,1,1,2,2,2	16	0	76·4
11	21 43	497	283	22 35	214	13 15	15·2	−12·7	22 2	27·9	20 24	988	883	22 10	155	2,2,2,1,2,2,4,5	20	1	77·2
12	18 4	416	350	15 3	66	14 9	20·0	−11·0	22 53	31·0	19 47	935	871	24 0	64	2,1,1,2,3,3,2,4	18	0	77·9
13	20 1	437	304	21 0	133	20 23	15·4	−11·5	22 54	26·9	20 4	989	790	21 20	199	3,2,2,2,1,3,5,4	22	1	78·0
14 d	12 50	547	−354	2 5	901	7 51	30·1	−71·9	2 6	102·0	12 38	1049	587	22 53	462	8,5,4,5,5,4,5,7	43	2	78·0
15	21 24	434	305	8 57	129	21 46	21·1	−10·4	18 50	31·5	18 21	950	794	0 0	156	4,2,3,3,3,3,4,4	26	1	78·0
16 q	18 10	401	346	10 47	55	11 59	13·3	−1·7	0 57	15·0	17 7	908	819	0 57	89	3,2,1,1,2,1,2,0	12	0	78·2
17 q	22 22	415	356	11 35	59	13 17	16·8	3·3	22 20	13·5	20 41	907	885	22 24	22	1,2,2,1,2,1,2,2	13	0	78·5
18	21 20	433	332	22 46	101	1 9	17·1	−0·6	23 30	17·7	16 47	902	771	23 7	131	3,1,1,1,0,2,1,4	13	0	78·5
19	14 18	469	338	12 54	131	14 0	29·4	−7·8	20 59	37·2	14 54	1036	828	23 8	208	2,1,2,3,5,4,3,4	24	1	78·2
20	16 38	537	218	0 49	319	0 32	24·6	−17·4	16 48	42·0	16 36	1100	726	0 48	374	5,4,3,3,4,5,3,5	32	1	78·6
21	18 43	538	264	3 2	274	0 3	24·8	−39·4	18 42	64·2	18 36	979	746	0 18	233	4,4,3,3,3,3,6,4	30	1	78·6
22	17 58	528	247	3 12	281	3 5	26·1	−47·4	18 0	73·5	17 55	1041	746	3 24	295	4,4,3,4,3,3,5,4	30	1	78·0
23	21 40	484	342	11 26	142	22 20	24·0	−17·5	21 37	41·5	16 54	973	778	22 18	195	3,2,2,2,3,4,3,5	24	1	77·2
24	21 46	419	345	21 24	74	20 55	14·1	−16·1	21 44	30·2	17 17	928	836	0 0	92	3,2,1,2,1,3,3,4	19	1	76·5
25	16 56	415	347	9 54	68	13 33	16·0	−4·3	19 13	20·3	19 11	919	866	0 54	53	1,2,1,2,2,2,3,2	15	0	75·8
26 q	20 35	406	360	11 18	*46*	13 35	15·0	3·4	8 27	*11·6*	17 6	905	879	2 25	26	1,1,1,1,1,1,1,1	8	0	75·8
27 q	23 12	419	353	11 7	66	12 52	16·0	2·9	8 20	13·1	16 53	898	880	11 59	*18*	0,0,1,1,1,1,1,1	6	0	76·0
28 d	17 45	933	51	21 6	882	15 5	38·2	−35·9	20 51	74·1	17 37	1110	571	21 5	539	5,3,2,4,5,7,7,6	39	2	76·0
29	18 59	669	−32	22 33	701	21 30	46·6	−51·1	22 27	97·7	18 54	1061	564	22 35	497	5,4,2,3,4,4,7,7	36	2	76·0
30 d	19 14	707	*−631*	23 34	*1338*	21 56	100·5	*−133·5*	23 32	*234·0*	19 18	*1183*	405	21 52	778	5,5,4,3,4,6,8,9	44	2	75·7
31 d	0 16	485	−436	1 11	921	0 45	65·6	−76·5	1 10	142·1	11 58	1023	537	0 16	486	8,7,4,4,4,4,3,3	37	2	75·5
Mean	− −	508	186	− −	323	− −	29·6	−25·2	− −	54·7	− −	991	732	− −	259	−	−	0·94	76·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

16 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	386	370	371	369	371	374	372	366	361	355	353	355	358	367	369	380	384	385	385	388	395	399	387	380	374
2	348	366	372	383	389	392	389	373	358	352	353	359	377	384	401	406	382	379	388	397	395	398	383	387	380
3	392	387	357	337	382	382	377	371	366	357	357	365	363	379	403	419	410	394	397	394	393	388	391	403	382
4	393	383	382	384	393	388	381	375	369	358	354	358	364	374	381	385	386	391	396	397	395	395	394	393	382
5	391	391	390	389	387	384	391	388	377	367	362	361	362	370	377	388	395	391	398	400	400	392	378	377	384
6	386	373	389	386	386	369	384	389	382	374	367	362	369	373	384	403	401	405	405	408	407	403	395	396	387
7 d	396	395	396	394	396	397	397	396	392	381	363	355	351	362	389	386	409	404	409	413	414	423	323	264	384
8	388	393	392	390	392	394	397	392	387	381	376	371	370	377	377	395	404	407	406	407	408	406	404	416	393
9	395	394	395	365	363	395	403	395	380	371	371	359	372	395	377	376	404	407	406	405	404	400	398	402	389
10 d	396	396	388	382	392	394	382	340	363	367	361	345	354	369	384	452	474	437	431	407	387	386	360	364	388
11	374	347	371	381	371	387	384	347	349	344	364	366	374	362	382	396	401	419	415	421	415	389	406	392	382
12	386	379	343	334	380	366	385	392	380	367	354	367	354	372	389	398	412	421	411	406	399	400	401	410	384
13	398	383	387	394	392	395	390	383	373	360	352	352	367	383	392	387	395	404	406	398	401	398	396	400	387
14 q	394	392	393	391	386	384	382	379	375	362	357	357	362	379	382	389	400	398	398	401	398	398	398	397	385
15	396	396	396	397	398	401	402	400	390	381	374	370	375	386	383	401	398	410	414	417	415	417	410	404	397
16	411	392	390	398	400	401	401	395	384	381	368	343	354	381	383	389	389	396	403	405	405	404	405	404	391
17	401	401	396	393	391	396	397	398	390	377	371	360	366	383	386	390	401	418	405	402	403	400	397	399	393
18	388	361	388	384	386	393	395	387	378	373	368	373	376	363	381	401	402	397	399	411	404	391	390	381	386
19 d	389	381	378	399	391	287	308	294	293	358	348	346	341	371	353	410	404	450	446	427	393	396	389	396	373
20	392	367	372	378	390	394	384	370	370	374	362	354	356	376	384	387	394	404	416	416	408	410	400	377	385
21	372	354	363	374	385	381	383	388	383	372	368	366	379	374	384	391	397	410	425	416	412	402	402	401	387
22 q	401	397	396	392	390	383	377	388	384	375	366	362	363	372	384	383	391	403	408	409	406	405	405	400	389
23 q	401	399	398	397	397	398	395	390	382	370	364	354	353	367	378	385	395	407	414	412	410	405	407	406	391
24 d	406	408	405	402	405	406	402	400	374	273	288	357	410	501	703	557	631	623	448	398	303	264	260	280	*413*
25 d	243	173	286	296	308	276	299	348	354	344	336	354	377	384	379	463	469	445	429	435	396	367	358	376	*354*
26	346	329	324	376	345	346	375	381	367	341	369	371	370	369	369	379	396	408	400	401	398	387	380	359	370
27 q	362	374	380	381	380	381	384	377	369	366	365	368	371	377	381	380	400	410	411	407	393	392	388	388	383
28	397	388	388	363	375	389	384	384	378	362	353	350	351	381	390	427	455	447	430	436	391	354	362	392	389
29	337	131	194	351	382	384	373	357	355	362	366	367	373	380	381	380	384	392	395	396	400	398	388	389	359
30 q	388	389	384	377	382	393	388	383	375	365	361	361	365	372	376	383	393	396	400	395	395	396	393	391	383
Mean	382	366	372	378	383	384	382	378	371	362	*359*	360	366	379	393	402	412	*415*	410	407	398	392	385	384	384

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -13γ.

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

17 LERWICK (D) — 12° + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	5·1	3·1	5·3	8·0	5·6	5·0	4·5	3·6	3·3	4·8	7·3	12·2	12·7	13·2	12·2	9·1	9·3	8·5	7·6	7·3	7·3	9·4	4·1	3·2	7·2
2	4·5	8·2	1·3	2·6	2·2	2·0	2·6	2·3	5·1	8·1	9·8	12·9	16·4	19·5	16·0	14·0	12·2	10·5	9·6	9·5	8·3	-2·8	0·3	2·7	7·4
3	5·3	4·2	2·5	7·2	1·2	-0·6	3·1	3·1	3·3	5·8	8·8	12·0	15·3	16·5	17·6	12·1	14·0	12·0	11·6	5·3	2·4	6·5	7·2	-0·1	7·3
4	3·9	4·2	6·1	6·3	5·4	6·3	7·5	6·3	5·0	7·4	9·8	12·9	14·9	14·3	12·5	10·4	9·0	8·1	7·6	8·0	7·1	6·2	5·2	8·4	8·0
5	7·1	7·0	6·0	5·6	5·6	6·5	6·1	3·0	3·1	4·0	7·0	10·7	13·5	15·0	13·2	11·7	10·3	8·4	7·2	7·1	7·8	5·0	2·9	5·2	7·5
6	3·9	3·5	3·7	0·1	-1·2	2·3	5·2	3·5	4·4	5·8	8·4	11·5	14·6	15·8	15·7	14·7	12·1	10·6	9·5	8·7	8·9	5·9	-0·7	4·4	7·1
7 d	7·6	7·5	7·2	7·1	6·9	5·8	4·6	3·5	3·1	5·4	8·4	13·0	16·0	18·2	18·1	14·3	12·0	11·6	11·0	9·5	0·5	-13·4	-8·6	-7·5	6·7
8	0·1	2·1	5·1	6·6	6·1	5·4	4·0	2·6	2·4	4·2	6·6	9·9	12·8	13·6	13·3	12·3	11·7	9·6	4·6	8·0	8·4	8·3	5·4	-0·1	6·8
9	-0·7	2·3	5·8	2·2	7·1	11·5	9·7	6·0	4·8	5·2	8·0	10·1	14·4	17·7	17·1	14·9	11·3	9·7	9·1	9·3	9·0	7·4	6·0	6·1	8·5
10 d	6·9	7·1	7·7	10·2	7·8	6·3	7·6	10·1	7·8	6·0	7·1	9·2	12·3	13·9	14·1	12·7	3·6	13·3	4·4	0·0	7·3	6·0	-16·3	-0·2	6·9
11	6·1	10·5	11·1	5·0	3·8	5·2	4·3	7·8	8·1	5·2	4·7	8·0	12·3	14·4	13·0	12·9	11·5	11·0	2·3	1·7	0·1	2·2	5·7	5·8	7·2
12	9·2	8·4	10·2	11·4	13·5	15·3	6·6	6·9	2·9	3·6	6·6	11·2	12·1	13·9	13·3	11·1	7·0	8·6	8·9	8·0	7·8	7·8	8·2	5·0	9·1
13	4·8	14·0	7·6	6·6	6·4	5·0	3·5	1·5	1·1	2·2	4·4	8·0	11·0	13·2	13·1	10·6	9·1	8·3	7·0	7·1	5·6	5·5	6·6	8·2	7·1
14 q	9·8	8·0	6·6	5·7	5·1	7·2	6·4	5·5	4·0	5·4	7·1	9·7	12·5	13·7	11·6	10·1	9·0	8·2	6·4	6·6	7·6	7·7	7·7	7·5	7·9
15	7·1	6·7	6·2	5·9	5·2	4·9	4·1	3·1	2·6	3·8	6·3	9·8	13·5	15·7	12·9	11·9	11·2	9·8	9·4	8·9	9·3	9·1	8·6	7·2	8·1
16	8·8	1·1	1·4	3·8	3·6	4·4	4·7	4·8	4·4	4·1	8·3	11·6	15·3	16·2	13·3	11·5	10·2	8·4	8·1	7·5	8·0	7·3	7·4	7·6	7·6
17	8·2	7·2	6·9	7·8	8·0	4·6	3·2	3·4	3·7	6·1	8·1	10·5	12·8	14·9	15·1	13·6	13·3	12·9	8·9	8·3	7·6	7·4	7·7	7·8	8·7
18	10·4	4·5	2·6	5·0	4·7	5·0	4·8	5·1	4·7	5·6	8·0	11·0	13·0	12·8	12·7	11·0	8·1	7·7	7·1	8·3	8·6	2·6	-10·0	6·0	6·6
19 d	4·4	7·1	10·1	5·1	8·4	26·3	34·2	12·3	8·2	13·2	11·9	11·3	13·3	12·9	12·4	11·2	10·6	11·2	0·1	4·1	4·1	4·4	8·1	6·7	*10·5*
20	7·2	9·7	10·1	6·4	5·0	3·6	4·6	7·5	6·1	5·7	6·6	9·5	11·9	13·2	13·3	12·0	10·8	9·1	8·7	6·8	0·1	0·1	4·0	-1·0	7·1
21	2·2	10·8	9·8	9·7	6·1	7·7	7·0	4·3	3·3	5·1	7·1	9·5	12·4	12·7	12·2	11·2	9·9	8·1	6·6	5·4	7·9	6·5	6·8	7·0	7·9
22 q	7·3	6·5	6·7	5·9	5·6	5·2	7·3	3·4	1·7	4·1	7·0	9·9	12·4	13·3	12·2	10·4	9·5	8·2	4·4	7·1	7·5	7·9	6·1	6·6	7·3
23 q	6·6	6·2	6·1	5·2	4·6	4·1	2·9	2·6	2·7	4·1	6·3	9·2	12·1	12·7	12·9	11·7	10·7	9·6	8·7	8·1	7·8	7·7	8·1	8·2	7·5
24 d	7·1	5·7	5·3	4·1	3·0	1·5	1·5	0·8	1·6	4·9	12·6	17·1	21·5	25·2	15·2	22·0	27·9	22·0	-6·7	8·0	2·7	0·6	-5·6	-4·2	8·1
25 d	-5·0	-3·7	-11·6	-6·6	-3·5	6·3	10·2	9·2	6·5	6·0	9·9	11·2	14·4	16·2	15·1	12·9	8·1	13·8	5·0	4·1	6·0	9·0	8·7	3·3	6·1
26	6·2	7·4	7·1	5·2	4·7	6·4	6·4	4·2	4·0	4·2	4·5	4·9	8·3	10·7	11·2	10·4	9·5	7·7	6·2	6·5	7·2	7·2	2·0	-0·3	6·3
27 q	2·2	3·8	6·0	4·9	3·8	3·6	2·4	2·3	2·4	3·0	5·1	8·2	10·1	11·6	11·2	11·0	10·2	8·3	7·4	6·6	7·4	5·3	3·2	4·1	6·0
28	5·2	7·0	7·4	7·2	9·2	1·2	2·7	3·9	5·2	6·1	8·7	11·4	13·2	15·3	15·0	8·5	6·6	10·2	7·5	4·6	-1·7	-2·4	-6·2	-1·7	6·0
29	-12·6	-32·6	-4·1	-3·7	1·2	3·0	1·7	2·6	8·5	8·8	8·0	8·7	10·1	10·5	10·3	9·7	9·4	8·8	8·2	7·6	7·2	6·8	4·3	5·6	*3·7*
30 q	2·5	3·6	2·7	1·2	1·2	2·9	3·2	3·6	4·4	4·4	6·4	8·1	10·1	11·3	11·0	10·6	9·9	8·5	7·1	6·4	5·9	6·3	6·6	6·3	6·0
Mean	4·7	4·7	5·3	5·1	4·9	5·8	5·9	4·6	4·3	5·4	7·6	10·4	13·2	*14·6*	13·6	12·0	10·6	10·1	6·8	6·8	6·1	4·9	*3·1*	3·9	7·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

18 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	891	896	902	901	901	907	909	910	907	907	907	906	903	907	911	918	918	916	913	910	906	871	833	835	899
2	841	815	840	857	865	876	881	887	890	891	891	892	893	902	926	935	922	908	904	901	906	898	885	879	887
3	868	885	879	837	845	863	884	893	893	894	888	888	892	896	910	948	957	941	921	929	916	907	908	885	897
4	887	890	886	883	890	893	895	894	896	899	902	901	899	895	894	900	902	905	906	906	907	906	901	892	897
5	883	893	899	899	899	894	883	890	900	895	896	897	894	891	890	892	894	903	903	903	904	908	898	864	895
6	882	888	852	862	880	888	868	874	884	886	889	891	891	893	896	902	910	906	906	905	906	908	907	896	890
7 d	894	895	894	894	893	893	893	893	891	887	889	889	887	884	884	894	893	901	897	899	917	916	825	691	883
8	758	848	876	884	889	888	891	893	893	892	894	894	897	901	903	902	909	916	918	909	901	900	889	851	887
9	835	861	878	872	870	857	870	876	887	892	893	893	896	914	934	933	939	920	907	903	898	900	897	886	892
10 d	892	895	900	892	888	890	889	887	886	894	900	902	895	897	903	926	983	959	977	940	922	892	855	839	904
11	853	860	862	880	884	889	889	886	887	903	900	898	897	908	909	920	925	920	934	918	890	895	872	878	894
12	880	878	857	830	836	836	865	876	887	893	893	892	902	899	905	914	921	918	907	908	906	897	892	874	886
13	877	865	877	890	895	897	900	900	898	893	888	885	887	895	908	916	912	907	905	903	898	893	890	879	894
14 q	879	888	895	897	897	892	892	888	885	886	886	885	886	887	892	894	895	899	902	900	897	893	892	892	892
15	893	893	895	896	896	895	894	893	892	888	882	879	874	878	885	887	893	894	895	894	893	888	890	892	890
16	876	834	867	882	888	889	890	892	890	887	887	892	894	904	917	906	903	901	898	897	896	895	890	889	890
17	888	888	892	893	890	890	892	889	889	887	887	893	892	887	889	891	894	903	913	904	901	899	896	893	893
18	863	823	843	874	885	887	889	891	893	895	895	893	899	909	910	912	934	925	912	904	903	884	786	844	886
19 d	870	872	840	847	841	776	730	795	862	864	888	899	904	913	934	926	935	926	964	934	924	899	840	870	877
20	874	875	857	870	892	894	893	893	897	893	897	899	900	898	913	910	908	904	903	911	909	878	853	806	889
21	843	843	847	869	870	874	877	883	889	894	896	899	897	909	908	903	901	902	908	914	884	884	893	894	887
22 q	893	895	895	896	894	894	889	883	884	886	890	891	889	890	891	901	902	903	905	899	895	894	888	894	893
23 q	894	895	895	895	894	893	892	891	891	890	891	897	895	890	887	887	888	890	891	891	893	894	892	891	892
24 d	891	892	894	895	894	893	889	885	883	905	879	874	891	944	1033	1012	1011	994	964	925	918	862	816	778	*909*
25 d	749	774	733	729	794	802	811	846	881	897	906	905	912	917	918	930	932	931	945	907	894	865	808	848	*860*
26	851	835	814	856	857	854	864	877	889	907	905	905	904	907	907	905	907	917	921	912	904	889	864	852	883
27 q	850	875	890	895	899	899	897	898	894	891	894	895	895	898	905	911	911	917	923	923	911	898	899	895	898
28	881	887	876	861	826	841	872	881	885	890	894	898	896	903	919	932	946	942	937	925	903	879	891	901	894
29	851	787	751	770	852	889	895	894	881	884	887	886	890	894	899	902	903	903	902	902	899	902	906	899	876
30 q	892	881	877	881	887	891	895	896	896	898	899	895	894	897	896	897	898	902	904	903	900	897	896	897	895
Mean	866	867	*865*	870	876	877	879	884	889	892	893	894	895	900	909	914	*918*	916	916	909	903	893	875	866	890

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -13γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

19 LERWICK — APRIL 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				^{o}A
1	0 0	432	346	11 41	86	13 7	14·6	−0·3	0 56	14·9	16 53	921	830	22 51	91	3,1,1,2,2,2,2,3	16	0	75·8
2	15 7	418	333	0 48	85	13 55	21·5	−11·5	21 27	33·0	15 7	939	808	1 21	131	3,1,2,1,3,3,2,4	19	1	75·9
3	16 1	440	300	3 10	140	14 8	17·9	−5·5	23 28	23·4	16 26	963	826	3 42	137	4,4,1,2,2,3,3,3	22	1	76·4
4	23 50	408	350	10 50	58	12 49	15·4	2·6	0 20	12·8	20 57	909	872	24 0	37	2,2,2,1,1,1,0,3	12	0	76·6
5	19 44	404	354	11 10	50	13 39	15 9	−1·4	22 22	17·3	21 43	916	854	23 8	62	2,1,2,1,1,2,1,3	13	0	76·6
6	21 45	419	359	11 42	60	13 57	16·1	−2·7	22 51	18·8	21 40	921	836	2 38	85	3,3,3,1,1,1,1,3	16	0	76·6
7 d	21 4	461	212	23 31	249	13 50	19·2	−28·3	23 38	47·5	21 3	962	*584*	23 48	*378*	0,0,1,2,3,3,4,6	19	1	76·5
8	23 11	422	324	0 0	98	13 10	14·4	−6·9	0 3	21·3	18 42	922	672	0 0	250	3,1,1,2,2,2,2,3	18	1	76·3
9	17 8	419	336	3 56	83	14 37	20·7	−2·8	0 26	23·5	16 37	948	827	0 29	121	3,3,3,2,3,3,1,1	19	1	76·6
10 d	16 15	541	325	7 37	216	17 41	15·6	−26·5	22 34	42·1	18 50	1021	827	23 20	194	2,2,3,2,3,5,4,5	26	1	76·8
11	19 55	440	313	1 42	127	13 39	15·0	−6·0	20 30	21·0	18 50	942	840	0 6	102	4,2,3,3,3,3,3,3	24	1	77·0
12	16 55	432	318	3 34	114	5 1	20·7	1·7	8 47	19·0	17 13	924	823	3 40	101	3,3,2,3,3,2,2,2	20	1	77·8
13	23 12	413	346	11 19	67	1 19	20·9	−0·3	8 1	21·2	15 41	918	850	1 48	68	4,1,1,1,2,1,1,2	13	0	79·0
14 q	16 52	405	354	11 10	51	13 22	14·1	3·6	8 24	*10·5*	18 35	902	876	0 25	26	2,2,1,0,1,1,1,0	8	0	79·2
15	22 13	433	363	11 50	70	13 28	17·2	2·1	8 38	15·1	3 29	896	872	12 33	24	0,0,0,1,2,2,1,2	8	0	79·3
16	0 49	422	328	11 56	94	13 5	17·1	−2·7	1 8	19·8	14 21	920	828	1 32	92	3,1,0,3,3,2,1,0	13	0	79·0
17	16 57	427	350	11 50	77	14 19	17·3	1·4	7 41	15·9	18 20	917	885	10 37	32	1,2,2,2,2,2,2,1	14	0	79·0
18	22 22	433	328	22 40	105	0 39	19·1	−32·2	22 6	51·3	16 36	941	760	22 13	181	4,1,1,3,3,2,2,5	21	1	79·3
19 d	19 2	465	234	5 25	231	6 12	*37·0*	−6·8	18 53	43·8	18 20	990	711	6 3	279	3,5,5,3,3,4,3,4	30	1	79·7
20	21 6	435	343	11 38	92	13 59	16·1	−5·6	20 20	21·7	19 56	921	796	23 27	125	3,2,2,2,3,2,3,4	21	1	79·9
21	20 22	442	338	1 21	104	20 32	16·6	−2·1	0 17	18·7	19 35	918	812	0 0	106	3,2,2,1,2,2,3,1	16	0	79·6
22 q	22 7	421	360	11 26	61	13 0	13·7	1·3	8 29	12·4	18 35	908	881	22 13	27	0,1,2,0,2,2,2,2	11	0	79·6
23 q	18 44	421	346	11 50	75	13 37	13·3	2·1	8 0	11·2	11 51	899	886	15 35	*13*	0,0,0,1,1,2,2,1	7	0	79·3
24 d	14 14	792	175	21 57	*617*	17 24	36·9	−19·5	22 26	56·4	14 25	*1084*	733	22 32	351	1,1,3,5,7,6,6,5	34	2	79·3
25 d	15 55	519	*−41*	1 18	560	15 26	19·1	−19·3	1 25	38·4	15 51	958	691	0 51	267	6,4,4,3,3,4,4,4	32	1	79·3
26	17 41	415	286	2 11	129	14 4	12·1	−1·7	22 39	13·8	18 14	924	800	2 22	124	4,3,2,3,2,3,1,3	21	1	79·5
27 q	18 59	422	350	0 6	72	13 51	12·1	0·8	0 0	11·3	18 47	926	846	0 6	80	3,0,1,1,1,2,2,1	11	0	79·4
28	15 57	478	332	21 34	146	13 57	17·1	−10·6	22 35	27·7	16 30	948	818	4 58	130	2,3,2,1,2,4,4,4	22	1	79·6
29	21 16	403	33	1 14	370	2 44	12·0	*−53·0*	1 21	*65·0*	22 37	907	730	1 24	177	6,5,3,2,1,0,0,1	18	1	80·2
30 q	18 9	401	356	10 42	*45*	13 38	11·6	−0·7	3 44	12·3	19 18	904	874	2 12	30	2,2,1,1,0,1,0,0	7	0	81·0
Mean	− −	446	302	− −	144	− −	17·7	−7·7	− −	25 4	− −	936	808	− −	127	−	−	0·57	77·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

20 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	390	388	388	388	388	388	384	379	374	367	363	363	375	387	405	402	422	441	435	422	406	379	377	387	392
2 q	392	388	385	381	391	390	387	385	383	377	369	365	365	386	392	401	416	417	415	418	411	394	385	401	391
3 q	403	393	396	394	386	401	399	397	386	371	367	362	365	373	391	409	422	427	431	416	407	404	400	399	396
4	397	395	390	383	398	397	359	408	397	381	367	371	373	369	377	389	411	416	413	411	405	394	395	399	391
5 q	395	387	389	393	396	396	396	392	381	374	371	370	372	381	377	398	399	416	420	414	408	404	403	403	393
6	400	398	402	401	401	397	394	385	371	365	368	372	365	376	394	389	404	425	427	424	418	407	405	405	396
7	405	405	401	388	376	386	388	388	384	374	369	367	373	379	388	394	404	414	411	412	410	409	404	405	393
8	405	403	400	398	396	397	397	392	384	380	377	367	379	379	397	407	420	425	429	443	434	402	397	400	400
9	401	398	391	380	381	382	378	388	383	376	373	364	371	385	394	394	408	413	424	432	416	417	417	414	395
10	374	362	405	410	406	403	397	397	385	375	362	366	382	379	390	402	409	431	427	428	423	418	416	411	398
11	406	393	400	405	403	400	395	388	377	365	357	370	376	384	396	403	404	403	406	410	414	409	409	407	395
12	403	394	395	399	399	397	395	387	377	371	371	374	377	389	395	407	410	414	431	432	433	417	410	402	399
13	382	361	396	403	400	404	402	391	377	364	363	365	378	384	397	414	425	450	430	425	416	408	405	406	398
14	405	404	402	406	403	401	395	384	372	360	359	359	363	389	399	414	416	419	421	423	418	414	411	411	398
15	391	392	400	401	407	407	402	394	383	373	365	366	370	376	385	401	412	425	439	426	424	420	416	405	399
16	397	417	408	410	407	411	401	376	393	388	380	354	358	399	440	409	398	418	421	418	416	420	418	413	*403*
17 d	411	408	408	405	362	305	331	311	310	321	348	368	363	400	393	409	405	406	410	414	404	406	397	395	379
18	392	383	384	369	362	391	391	387	380	369	362	363	366	378	392	407	402	413	431	424	422	402	409	396	391
19 q	393	391	371	373	391	394	392	390	386	372	365	368	376	381	385	390	396	412	428	417	414	405	400	399	391
20 q	397	395	396	399	398	396	392	388	380	374	372	371	383	390	397	404	416	424	421	421	417	414	416	417	399
21 d	405	400	403	397	398	394	381	379	387	381	380	387	387	404	408	398	427	458	463	456	445	366	334	348	399
22 d	305	185	265	248	363	385	381	377	366	356	371	380	395	424	395	416	393	402	423	440	469	400	398	397	*372*
23 d	390	376	366	373	365	379	377	373	363	354	365	378	402	389	434	435	435	456	471	440	419	362	340	348	391
24 d	364	367	349	360	347	335	328	314	336	366	377	371	391	394	419	417	434	469	466	438	414	389	379	378	383
25	351	328	367	376	371	385	382	374	354	351	366	366	394	406	417	440	455	463	462	431	414	400	381	382	392
26	372	367	385	394	391	391	379	364	373	377	370	362	374	383	390	391	413	427	440	431	417	407	403	395	391
27	393	389	394	390	387	388	388	383	378	373	365	369	379	386	398	395	425	427	432	434	420	411	400	399	396
28	398	388	391	393	398	395	383	372	367	373	376	377	376	379	399	414	427	429	431	434	425	414	388	393	397
29	391	367	396	385	354	375	391	371	357	367	374	378	382	384	394	419	425	426	434	433	423	416	406	394	393
30	388	395	411	408	405	403	402	398	394	387	380	381	379	385	386	394	419	425	425	437	426	420	417	411	*403*
31	402	364	365	379	399	403	396	401	399	392	388	388	388	396	398	398	394	440	448	441	417	410	405	399	400
Mean	390	380	387	387	388	390	386	381	375	370	*369*	370	377	387	397	405	414	427	*431*	427	420	404	398	397	394

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −12γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 LERWICK (D) — 12° + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	5·7	5·8	5·7	5·6	4·8	4·2	3·3	2·2	2·5	3·7	6·1	9·1	12·1	13·5	14·0	13·9	14·1	13·6	10·0	7·1	3·7	−3·4	0·1	1·4	6·6
2 q	2·5	1·3	−0·8	−3·1	−6·1	−5·9	−5·0	−2·1	−1·1	1·4	5·0	9·1	11·8	14·7	15·1	12·9	10·7	8·0	7·1	7·4	5·0	2·4	3·6	−3·2	*3·8*
3 q	−0·2	1·2	−0·5	−4·0	−2·1	−2·0	−3·6	−1·5	−0·2	2·9	6·1	9·3	11·5	12·4	11·7	11·5	11·2	10·4	9·4	8·6	4·7	2·4	5·9	6·3	4·6
4	6·3	5·9	4·4	8·7	2·2	−0·2	−0·1	1·6	3·3	5·4	10·1	12·2	15·1	14·3	12·8	10·3	9·0	7·4	6·6	8·0	7·6	8·5	9·0	7·1	7·3
5 q	8·2	9·0	5·2	3·5	2·9	2·9	2·7	3·8	5·0	6·2	7·2	9·2	11·4	12·0	10·7	9·4	8·6	9·0	7·6	8·6	8·7	8·2	8·0	7·9	7·3
6	7·8	8·0	5·9	4·0	2·1	0·7	1·6	2·8	5·0	6·9	8·0	9·9	12·3	11·1	10·8	10·2	9·6	9·5	8·8	4·6	8·4	8·1	8·7	8·1	7·2
7	7·7	8·9	7·2	5·2	5·9	2·7	2·9	2·3	0·8	2·6	5·1	7·5	9·8	10·6	10 6	10·4	9·7	8·8	8·5	8·0	8·4	8·2	6·6	7·2	6·9
8	6·8	6·8	5·4	4·7	3·8	3·2	2·4	2·1	3·0	5·6	9·1	13·2	15·9	17·9	13·7	11·7	11·8	11·6	11·2	10·5	6·4	4·6	4·5	6·0	8·0
9	6·6	4·6	3·2	5·0	6·0	3·8	12·2	8·5	4·9	7·0	9·1	13·0	14·8	13·3	10·5	9·1	8·9	8·9	9·1	8·9	5·2	7·5	8·2	7·8	8·2
10	10·8	9·0	−1·8	−2·0	−0·3	0·2	0·2	1·8	2·5	4·6	8·8	11·5	12·5	13·2	13·7	12·7	11·9	9·8	8·9	8·5	8·4	7·9	7·5	7·6	7·0
11	5·8	7·3	5·4	3·2	1·8	1·0	0·6	0·2	0·6	3·3	7·0	9·6	11·3	12·2	13·2	11·3	9·1	7·2	7·0	7·3	7·2	7·2	7·7	7·8	6·4
12	8·8	10·5	8·1	5·4	2·9	2·7	1·3	−0·1	0·3	3·2	7·0	10·9	13·0	14·0	13·1	12·8	12·8	11·1	10·6	10·4	9·3	4·4	3·3	3·7	7·5
13	1·6	8·5	4·0	2·8	4·0	5·5	5·4	3·7	4·2	5·8	8·1	11·2	14·8	16·2	16·8	13·5	11·7	11·7	8·8	8·6	9·0	8·4	7·2	7·1	8·3
14	6·8	6·1	4·6	4·2	2·0	1·6	1·7	1·0	1·7	3·4	6·4	10·6	13·9	14·0	13·3	11·1	8·8	8·2	7·6	8·0	8·3	8·6	8·4	4·4	6·9
15	2·8	−1·7	−1·0	2·1	1·8	1·1	−1·1	−0·4	0·4	3·9	7·0	9·2	11·5	13·5	13·1	12·0	11·0	9·7	9·3	8·4	8·9	8·1	8·4	7·8	6·1
16	1·1	1·6	1·7	3·0	6·9	4·3	2·2	6·6	4·8	6·4	7·0	10·2	13·2	14·7	10·4	14·0	14·0	12·5	12·0	10·7	9·9	9·2	8·3	6·9	8·0
17 d	6·7	6·0	5·1	6·0	18·7	22·9	19·7	10·2	7·8	3·8	4·2	7·3	11·8	12·9	12·3	11·1	12·9	11·3	9·8	8·0	5·7	7·6	6·7	4·4	*9·7*
18	4·2	7·1	7·1	8·0	7·6	4·1	3·4	1·4	2·4	5·2	6·9	9·3	11·2	12·9	13·3	11·5	10·4	9·3	9·6	5·1	1·2	6·1	3·2	6·3	6·9
19 q	5·8	6·8	9·3	8·5	4·2	2·3	3·4	3·1	2·5	3·2	5·6	8·4	10·1	11·5	12·2	11·6	11·0	9·2	9·1	8·6	7·8	7·6	7·4	7·2	7·3
20 q	6·9	7·1	6·7	4·8	1·8	0·6	0·1	−0·3	0·2	1·4	5·2	8·9	11·2	11·8	11·6	10·3	9·5	9·3	8·5	8·7	8·6	6·5	4·0	3·2	6·1
21 d	4·8	1·2	2·1	4·5	3·2	0·5	0·2	4·1	5·0	8·5	11·2	13·5	14·1	14·2	14·8	15·2	17·3	18·5	17·4	14·8	12·3	10·2	−10·1	−9·6	7·8
22 d	−1·5	−6·0	−9·4	−7·2	−2·6	1·0	1·2	0·7	2·5	7·1	5·1	8·5	10·2	14·0	13·5	16·0	11·3	10·5	10·5	8·4	−6·6	−2·5	3·8	5·6	3·9
23 d	7·2	11·5	8·4	4·9	−0·4	0·3	−1·2	1·2	0·2	5·4	9·5	12·1	16·7	13·5	16·2	13·9	11·2	10·4	7·6	6·2	5·5	8·1	−2·8	1·2	6·9
24 d	0·7	−4·6	−8·0	−5·0	5·2	14·3	18·1	11·2	8·2	3·0	4·8	8·4	11·0	10·8	12·3	13·7	11·7	13·1	11·9	7·8	4·0	−3·5	−4·0	2·6	6·2
25	−9·5	4·7	5·0	0·6	−0·8	0·4	0·3	0·3	1·2	4·4	6·3	9·6	12·3	14·8	15·9	16·5	16·1	13·8	12·1	11·0	9·4	2·4	3·3	4·7	6·5
26	6·4	9·6	5·4	2·1	2·9	2·6	2·8	3·5	2·9	3·1	6·7	9·8	12·1	12·4	11·5	9·4	10·1	8·8	7·0	5·8	6·4	7·8	5·7	2·0	6·5
27	2·3	3·7	3·6	2·7	2·1	1·5	0·2	1·3	2·8	3·8	4·7	7·3	11·3	12·6	12·4	10·8	11·0	10·2	9·1	4·9	6·3	5·2	4·6	6·6	5·9
28	2·2	1·4	1·8	−1·5	−2·5	−0·7	1·9	8·1	8·0	8·2	7·4	11·0	13·3	13·7	14·8	14·9	12·4	11·3	10·1	10·5	8·4	7·6	11·9	0·6	7·3
29	−0·1	0·3	1·9	1·6	1·8	6·0	3·7	3·0	3·3	4·1	8·0	10·1	12·7	13·6	12·1	12·5	11·8	9·3	7·8	9·3	9·0	7·3	4·8	5·4	6·6
30	6·3	−0·7	0·6	0·7	2·5	2·4	2·3	2·1	2·8	5·4	8·1	10·4	12·9	15·3	15·3	13·6	13·4	12·1	10·0	9·4	7·7	9·7	9·3	8·6	7·5
31	9·3	3·7	−7·3	−8·6	−4·2	−3·8	−1·0	0·4	0·7	1·2	3·2	6·6	9·9	12·2	12·2	11·1	12·2	12·6	11·2	2·6	7·1	8·3	7·7	6·5	4·7
Mean	4·5	4·7	2·9	*2·3*	2·5	2·6	2·6	2·7	2·8	4·5	6·9	9·9	12·4	*13·3*	13·0	12·2	11·5	10·6	9·5	8·2	6·8	6·1	5·2	4·8	6·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

22 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	899	899	900	900	902	902	902	898	893	890	889	888	882	886	893	907	912	935	962	961	947	934	902	896	*907*
2 q	893	892	886	874	857	861	874	876	874	875	878	883	889	892	903	908	910	918	915	912	917	917	901	882	891
3 q	882	886	885	888	891	875	881	881	884	886	886	889	890	891	891	894	905	917	924	929	918	898	896	893	894
4	893	890	893	877	865	850	834	804	823	846	863	872	879	889	892	893	901	924	933	919	907	895	864	884	879
5 q	878	867	879	891	893	894	896	893	890	891	891	889	885	880	884	886	892	892	898	899	897	895	895	893	889
6	892	889	886	890	890	890	890	890	890	889	886	892	899	901	907	907	904	907	920	924	891	897	897	897	897
7	896	890	877	868	851	833	850	865	877	884	883	883	886	888	890	891	893	896	897	898	898	876	887	893	881
8	894	893	893	893	893	890	887	886	886	886	884	887	883	882	880	879	885	892	895	905	940	925	917	907	894
9	903	903	899	886	851	837	840	840	857	870	876	880	879	890	902	904	899	893	891	894	905	898	891	868	881
10	784	770	804	830	864	880	885	883	882	883	884	885	889	896	899	905	909	909	908	899	894	891	891	891	876
11	870	842	871	883	892	892	892	892	892	889	889	890	901	900	898	901	901	900	896	892	891	891	891	891	889
12	889	883	884	888	892	894	896	893	892	886	879	877	881	882	884	889	892	899	897	894	892	896	875	866	887
13	847	826	848	874	892	887	881	881	885	884	880	878	878	884	895	905	912	912	926	919	911	902	895	891	887
14	892	893	897	897	899	897	897	897	892	890	884	882	881	882	889	889	898	900	900	898	895	890	885	863	891
15	813	833	859	879	887	890	893	893	887	883	882	879	878	878	878	882	888	892	892	898	893	893	891	879	880
16	854	826	856	871	876	878	887	888	874	877	882	890	887	893	935	938	920	901	894	892	891	888	887	887	886
17 d	887	888	890	889	865	776	780	829	853	871	905	924	912	929	955	929	901	895	896	906	919	888	842	857	883
18	870	869	876	869	853	876	884	890	893	893	885	882	885	890	892	901	901	898	899	914	911	900	853	861	885
19 q	879	879	880	862	876	884	889	893	895	895	893	888	887	892	895	899	898	899	900	904	903	902	899	896	891
20 q	897	895	891	889	892	891	894	898	893	886	878	874	878	885	889	891	888	888	895	895	894	894	889	880	889
21 d	867	860	878	887	888	888	890	880	873	874	873	872	877	880	888	894	895	909	938	927	920	898	822	769	881
22 d	770	705	708	626	715	779	841	873	877	878	887	899	915	920	928	899	906	893	887	900	902	867	878	878	*847*
23 d	868	819	817	820	833	848	870	871	874	879	880	882	891	915	905	923	928	928	901	877	875	817	800	726	864
24 d	780	765	760	795	792	745	766	817	828	866	885	900	917	942	927	919	923	922	906	901	882	846	848	840	853
25	804	789	814	853	866	874	890	890	893	892	887	891	898	918	938	940	945	945	935	924	910	876	811	855	885
26	866	839	847	874	888	894	896	893	889	888	887	890	889	895	904	909	901	909	917	917	911	897	837	842	887
27	863	875	884	886	893	891	894	897	895	888	887	885	885	890	890	895	892	905	908	902	900	896	895	888	891
28	866	875	879	875	880	882	885	881	883	875	874	876	878	885	887	892	912	923	920	908	903	900	823	825	883
29	827	838	866	875	865	853	859	869	874	868	868	869	879	889	895	895	909	920	917	907	908	893	866	865	878
30	835	814	852	878	887	890	893	894	893	886	880	876	878	876	879	885	892	900	903	901	908	900	892	888	883
31	866	822	767	806	853	871	879	878	882	881	880	878	874	876	890	908	905	900	925	933	913	900	894	886	878
Mean	862	852	859	864	869	867	874	878	880	882	883	885	887	893	899	902	904	907	*910*	908	905	892	875	869	883

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −12γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

23 LERWICK — MAY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A
1	17 6	459	350	11 27	109	17 6 6·8	−6·8 21 21	24·4	18 45	*970*	881	12 38	89	0,0,1,2,3,3,4,3	16	1	81·2
2 q	17 0	429	357	12 35	72	14 7 16·8	−8·7 4 59	25·5	17 45	923	850	4 59	73	1,2,1,1,2,2,2,3	14	0	81·3
3 q	18 30	434	358	11 37	76	13 24 13·0	−5·8 5 53	18·8	19 16	932	871	5 43	61	2,2,1,1,2,2,3,3	16	0	81·5
4	16 50	429	339	6 25	90	12 43 16·8	−5·6 6 18	22·4	18 20	937	796	7 4	141	1,3,4,3,2,2,2,3	20	1	82·0
5 q	17 59	425	359	14 32	66	13 29 12·5	2·0 6 5	*10·5*	19 1	901	863	1 5	38	2,1,1,1,2,2,1,0	10	0	82·0
6	20 0	457	356	12 5	101	12 33 13·6	−6·8 19 55	20·4	19 50	934	885	20 20	49	1,1,2,2,2,2,3,0	13	0	82·0
7	21 13	422	365	11 31	*57*	21 17 11·2	0·6 8 18	10·6	20 15	902	827	5 21	75	2,3,3,0,1,1,2,2	14	0	81·4
8	19 17	450	365	11 29	85	13 30 19·7	0·5 20 49	19·2	20 42	969	877	15 12	92	0,0,0,2,2,2,3,2	11	0	80·8
9	19 22	440	354	11 50	86	6 32 15·7	0·7 2 25	15·0	20 22	908	834	7 2	74	2,3,3,2,2,1,2,3	18	0	80·2
10	17 48	438	335	1 9	103	1 12 16·8	−3·9 2 43	20·7	16 30	914	750	1 24	164	4,3,2,2,3,2,1,1	18	1	80·3
11	20 25	414	352	10 41	62	14 22 13·8	−0·8 8 20	14·6	13 4	905	825	1 34	80	3,1,1,2,1,2,1,1	12	0	80·7
12	20 43	442	367	9 44	75	13 43 14·6	−0·8 8 15	15·4	21 20	901	856	24 0	45	1,1,2,1,1,1,2,2	11	0	81·4
13	17 23	461	343	1 12	118	12 57 18·1	−1·4 0 50	19·5	18 20	929	807	1 44	122	3,2,2,2,3,3,2,1	18	1	81·6
14	17 1	442	350	12 9	92	13 17 14·8	−1·5 23 43	16·3	17 37	902	834	24 0	68	1,1,1,2,2,2,1,3	13	0	81·4
15	18 36	444	358	12 0	86	13 40 14·3	−4·4 6 57	18·7	19 36	901	808	0 53	93	3,1,1,1,1,2,2,2	13	0	80·3
16	14 9	461	339	12 23	122	15 53 17·6	−3·8 0 48	21·4	15 3	958	815	1 6	143	3,2,3,3,4,3,1,1	20	1	79·7
17 d	22 5	435	285	5 19	150	6 16 *29·3*	2·2 9 11	27·1	14 22	961	764	6 28	197	1,4,4,4,3,3,2,4	25	1	79·9
18	18 43	439	333	4 9	106	14 43 13·7	−2·8 20 12	16·5	19 41	920	843	4 25	77	2,3,2,1,2,2,3,3	18	1	80·2
19 q	18 39	434	353	2 57	81	14 20 12·6	1·0 5 40	11·6	19 12	905	857	3 23	48	3,3,1,1,1,1,2,0	12	0	81·2
20 q	17 41	431	364	11 29	67	14 29 12·3	−0·6 8 20	12·9	7 28	898	873	11 2	*25*	1,1,1,1,1,1,0,2	8	0	81·9
21 d	17 34	486	309	21 53	177	17 34 20·7	−15·8 22 23	36·5	18 58	959	733	23 17	226	2,1,2,2,2,4,3,5	21	1	82·9
22 d	20 37	533	*53*	1 10	*480*	15 25 18·1	*−32·4* 20 36	*50·5*	20 30	948	*573*	3 20	*375*	6,5,3,3,4,3,5,3	32	1	83·0
23 d	18 35	*540*	300	21 49	240	12 55 19·8	−10·9 18 34	30·7	18 32	936	706	23 21	230	3,3,2,3,3,2,4,5	25	1	82·8
24 d	18 8	498	299	7 50	199	6 23 22·0	−9·7 1 57	31·7	13 33	946	733	5 26	213	3,4,4,3,3,3,4,3	27	1	82·2
25	18 50	489	310	1 44	179	15 59 19·8	−14·7 0 33	34·5	17 23	956	768	1 24	188	4,3,2,3,3,2,4,4	25	1	81·9
26	18 20	456	346	11 49	110	14 1 13·2	−0·7 23 4	13·9	18 54	921	816	22 42	105	3,2,2,2,2,3,2,4	20	1	81·7
27	18 47	452	358	10 26	94	14 26 13·3	−1·7 6 53	15·0	18 41	913	855	0 4	58	2,1,1,1,1,3,3,2	14	0	81·7
28	17 41	441	365	12 5	76	22 14 19·8	−3·9 4 7	23·7	17 18	927	793	22 46	134	2,2,2,2,2,2,2,4	18	1	81·9
29	18 10	440	348	4 20	92	13 31 14·3	−1·7 1 25	16·0	17 43	925	819	0 22	106	3,3,2,2,2,2,1,2	17	1	83·0
30	19 25	460	371	0 12	89	14 7 16·3	−3·4 1 26	19·7	20 6	912	799	1 16	113	3,2,1,1,2,3,3,1	16	0	83·4
31	18 17	459	342	1 55	117	1 36 14·0	−10·5 3 8	24·5	19 11	946	747	1 55	199	4,4,2,1,2,3,3,2	21	1	83·4
Mean	− −	453	335	− −	118	− − 16·3	−4·9 − −	21·2	− −	928	808	− −	119	−	−	0·52	82·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

24 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	391	403	398	388	376	390	394	382	371	380	371	368	375	371	397	405	417	414	424	415	411	406	408	388	393
2 q	389	399	401	403	403	400	395	388	384	378	376	375	376	379	385	389	400	412	421	422	418	414	410	408	397
3 q	408	413	412	413	413	408	403	394	385	378	373	364	377	377	393	397	409	421	424	421	417	414	411	409	401
4 q	409	404	399	400	403	403	398	386	373	369	368	369	378	389	400	408	420	431	431	426	423	420	411	413	401
5 q	405	405	411	405	402	392	391	393	385	375	373	366	378	382	391	401	412	434	428	430	424	418	408	405	401
6	405	405	407	411	410	409	400	393	386	379	367	366	394	399	390	398	409	424	424	429	424	421	416	412	403
7	413	410	409	408	409	403	397	388	384	376	374	376	389	402	421	410	417	415	416	419	417	414	410	408	404
8	407	405	405	408	408	407	402	391	382	357	365	379	376	383	388	412	415	423	420	419	419	416	413	410	400
9	407	408	409	413	417	417	414	401	385	385	372	367	371	406	386	404	422	433	444	446	444	445	433	429	411
10 d	421	404	411	412	409	405	376	358	389	383	370	374	366	400	457	472	516	499	478	455	436	424	422	417	*419*
11 d	425	408	410	403	399	393	383	374	365	360	362	371	387	395	403	397	427	437	448	465	420	411	399	402	402
12	405	399	396	400	395	389	390	380	370	365	360	352	365	363	370	410	414	449	463	463	434	421	411	411	399
13 d	405	403	405	410	419	408	382	328	299	298	318	379	409	358	378	399	420	476	478	443	402	328	277	217	377
14 d	148	205	243	320	326	339	362	376	373	362	350	355	365	393	398	397	397	405	414	415	412	414	424	374	*357*
15 d	386	374	353	317	329	328	353	360	333	296	325	352	371	383	412	405	411	395	411	422	431	424	415	411	375
16 q	403	395	399	397	395	392	386	385	383	378	372	369	367	369	375	389	406	418	422	418	411	411	402	401	393
17	398	397	399	400	405	401	397	387	376	370	374	367	369	384	389	409	444	444	440	448	410	385	339	285	392
18	272	304	248	297	389	392	384	385	385	381	374	373	378	385	391	399	406	407	437	442	421	412	406	405	378
19	404	403	404	403	408	403	402	397	389	379	370	362	369	380	405	398	412	428	426	442	438	411	398	391	401
20	376	396	377	355	400	382	308	330	374	389	376	372	380	388	398	420	426	411	418	426	431	414	403	345	387
21	374	383	359	388	385	376	371	379	383	376	371	375	379	372	387	392	412	415	438	438	429	412	405	400	392
22	403	397	398	399	395	397	383	373	350	358	353	357	376	382	386	397	405	423	416	439	429	422	402	402	393
23	390	393	384	389	398	398	397	393	380	377	380	381	383	380	391	406	421	423	429	428	423	414	407	406	399
24	401	400	402	402	404	398	394	389	377	367	361	374	384	409	411	410	429	433	426	435	423	412	402	406	402
25	390	397	398	401	400	398	394	387	374	365	365	372	377	380	391	397	408	424	444	447	436	420	405	392	398
26	383	383	394	393	396	396	395	386	377	371	372	372	381	390	404	419	431	443	461	465	444	431	422	414	405
27	401	411	415	420	416	397	391	380	367	358	354	347	367	385	389	406	412	421	436	429	433	419	414	407	399
28	405	388	382	398	402	404	399	389	382	367	369	371	372	380	409	406	413	425	437	444	433	423	410	403	400
29	377	364	395	401	405	404	402	395	384	381	373	373	368	384	400	411	418	433	435	433	426	416	405	400	399
30	402	402	399	402	406	406	400	391	381	378	363	374	381	384	391	406	423	431	431	430	430	419	418	419	403
Mean	387	389	387	392	397	395	388	381	374	368	*365*	368	377	384	396	406	419	428	434	*435*	425	414	404	393	396

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -7γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

25 LERWICK (D) — 12° + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	7·7	4·3	1·4	1·4	6·1	4·7	3·9	2·1	3·0	2·6	5·2	8·5	11·4	11·8	11·9	11·5	12·2	10·8	10·0	9·5	8·6	7·9	7·5	4·1	7·0
2 q	6·5	3·1	1·7	2·5	1·9	2·0	1·3	0·5	0·1	1·5	3·9	6·5	9·0	10·4	10·9	11·0	10·1	9·3	8·3	8·0	7·9	7·5	7·2	6·6	5·7
3 q	5·9	5·5	4·7	4·0	2·7	1·3	0·8	0·6	1·5	4·3	6·2	9·3	10·7	11·5	11·9	11·5	9·8	8·8	8·5	8·3	8·4	8·8	8·9	7·3	6·7
4 q	7·6	7·1	4·8	1·3	0·4	0·1	0·8	0·6	2·8	4·2	6·3	8·1	9·6	10·6	11·5	11·4	10·9	10·5	10·1	10·0	9·5	8·3	7·7	5·1	6·6
5 q	5·3	4·7	3·9	2·5	1·1	−0·9	−0·8	−1·0	0·4	2·2	5·3	7·9	9·8	10·8	11·8	11·0	9·7	9·7	8·6	8·2	8·9	8·3	7·7	6·3	5·9
6	5·0	3·5	2·2	1·1	2·0	0·0	0·0	0·2	−0·5	0·2	3·9	10·0	12·9	14·6	13·4	12·2	10·1	7·3	6·8	6·9	6·5	6·5	6·3	5·9	5·7
7	5·8	5·2	4·6	4·6	3·4	2·0	0·6	0·2	0·9	2·1	5·7	10·6	13·7	16·1	15·2	13·2	11·3	9·5	8·6	8·0	7·8	7·1	7·7	8·0	7·2
8	7·1	5·9	5·0	3·7	3·3	2·1	0·2	−1·0	−1·2	0·1	3·6	7·4	10·5	11·0	10·8	11·1	10·9	9·3	7·9	7·7	7·8	7·4	6·9	6·6	6·0
9	6·0	5·5	4·5	3·2	2·0	0·6	−0·6	−1·4	−3·4	−5·5	1·8	10·0	12·9	13·8	15·9	15·7	13·1	10·2	8·3	7·8	8·0	9·2	7·7	5·3	6·3
10 d	8·0	4·5	3·3	0·7	−1·6	−0·1	6·9	9·7	8·1	6·3	9·0	10·9	15·0	17·9	18·8	27·5	19·3	17·6	14·7	14·0	12·1	9·0	5·5	5·0	*10·1*
11 d	6·9	2·4	1·0	0·0	−0·8	−2·4	−4·3	−5·6	−3·7	0·4	5·2	10·4	14·1	14·6	13·8	11·7	12·3	11·4	10·9	5·3	6·7	5·3	3·4	4·8	5·2
12	4·5	5·7	7·0	7·6	3·3	2·4	−0·6	0·0	0·1	2·4	5·7	9·1	11·2	11·1	10·7	11·4	11·2	11·0	11·2	10·1	7·9	6·7	6·0	6·0	6·7
13 d	5·5	4·9	3·9	2·8	−1·0	−3·4	−4·1	0·0	11·1	10·6	13·1	11·6	12·5	16·4	12·6	12·3	13·0	10·7	11·5	10·0	2·9	−0·6	−2·2	−2·9	6·3
14 d	−14·9	−20·0	−32·1	−14·2	−3·1	1·0	2·0	−2·5	−0·8	1·8	3·5	6·2	9·0	9·3	10·2	9·6	8·8	8·7	9·4	9·5	8·1	8·0	7·7	−1·7	*1·0*
15 d	−2·8	−2·6	−3·6	−7·4	−2·5	−0·2	7·1	7·9	6·5	12·4	12·0	11·2	14·7	15·8	15·0	17·1	15·4	11·5	10·2	10·9	9·6	8·7	6·6	6·3	7·5
16 q	5·4	6·0	1·3	1·0	−0·1	−0·4	0·2	1·0	2·5	2·5	2·6	4·6	5·9	7·5	8·4	9·1	9·8	9·8	9·6	8·2	7·7	5·7	6·4	5·5	5·0
17	4·9	4·5	3·7	2·5	1·0	0·3	−0·2	−1·4	−0·3	1·9	3·1	6·3	8·5	9·6	12·0	13·6	14·2	13·2	11·4	8·5	9·0	−3·2	−6·2	−8·6	4·5
18	−8·5	−12·7	−13·5	−4·8	−5·1	−3·2	−2·8	−1·9	−1·0	1·1	3·0	6·2	9·5	12·7	14·8	14·8	12·6	9·9	9·3	7·5	7·2	7·0	5·5	4·7	3·0
19	4·5	4·1	3·7	3·7	2·0	1·3	0·4	0·9	0·8	2·5	5·6	8·9	12·8	14·4	15·1	16·3	13·3	12·2	11·4	9·9	9·1	4·9	−0·3	2·6	6·7
20	−2·5	−3·5	−2·0	5·5	−3·0	2·1	13·4	16·7	8·3	2·7	4·5	8·8	11·9	15·1	14·2	13·0	12·8	11·1	10·3	10·2	2·2	4·8	6·0	4·9	7·0
21	1·1	3·2	7·6	4·1	0·6	1·0	1·6	7·0	1·9	3·0	6·2	7·8	9·5	10·1	10·7	10·1	9·6	7·8	7·5	3·8	4·6	6·0	6·3	7·5	5·8
22	6·1	0·9	2·5	2·1	0·8	0·0	−2·5	−1·8	−1·4	2·7	4·9	9·0	11·8	13·4	13·0	11·4	10·7	8·9	6·7	8·1	6·6	6·2	4·0	5·7	5·4
23	4·6	5·1	1·6	0·8	0·0	0·5	−0·2	0·8	1·7	4·4	6·3	9·4	10·6	11·4	11·5	11·4	10·0	8·8	7·9	8·0	7·9	5·1	5·9	6·1	5·8
24	4·4	3·0	2·6	0·9	0·1	−0·8	−1·2	1·1	0·8	3·0	5·1	9·3	12·4	15·6	16·4	13·9	14·0	12·7	11·0	10·4	3·9	5·2	7·0	−1·5	6·2
25	−0·1	0·7	0·0	0·8	0·9	0·7	1·3	2·1	2·4	3·8	5·2	9·3	11·2	11·4	11·5	12·0	11·2	10·2	10·0	9·6	5·4	7·9	5·1	1·5	5·6
26	−5·4	−1·5	−0·4	−1·6	−4·0	−6·9	−7·1	−4·1	−0·9	2·6	6·3	9·1	11·6	13·9	15·5	14·2	12·9	12·1	12·1	13·3	10·6	−0·3	1·1	−1·6	4·2
27	−0·8	−0·4	−4·9	−2·4	−1·7	1·0	5·6	4·0	5·1	6·0	9·7	13·0	14·5	16·2	14·7	11·9	10·8	9·7	9·6	9·4	10·2	7·9	7·4	6·1	6·8
28	7·3	9·1	5·0	1·7	−0·3	−2·0	−1·6	−1·3	−0·2	2·9	5·5	7·6	10·5	12·6	13·8	11·9	10·2	9·5	10·1	10·5	8·1	8·1	7·6	8·4	6·5
29	7·6	3·7	−0·9	−3·3	−3·1	−5·6	−4·0	−1·0	1·3	4·3	7·1	11·2	14·4	15·0	14·4	12·5	11·2	11·0	9·9	8·0	6·7	6·6	5·9	5·1	5·7
30	3·9	3·8	2·3	0·7	−2·0	−1·3	−1·9	−0·6	1·3	1·5	5·0	8·1	10·3	11·6	11·6	11·5	10·0	9·3	9·0	8·2	8·0	7·0	6·9	8·1	5·5
Mean	3·2	2·2	0·7	0·9	0·1	*−0·1*	0·5	1·1	1·6	3·0	5·7	8·9	11·4	12·9	*13·1*	12·9	11·7	10·4	9·7	8·9	7·6	6·2	5·4	4·2	5·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

26 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	875	859	876	886	869	851	865	882	890	890	889	887	887	889	883	890	899	902	902	901	898	893	883	879	884
2 q	876	877	886	885	886	888	892	892	893	895	891	888	885	882	884	889	890	890	890	892	892	892	892	891	888
3 q	888	886	887	889	888	888	889	890	891	888	881	880	876	879	881	886	887	892	896	898	897	892	890	889	888
4 q	887	884	884	888	887	887	886	886	882	877	876	875	878	875	874	877	877	876	885	888	888	888	882	876	882
5 q	885	886	883	885	887	888	881	881	879	875	872	874	871	875	880	881	881	881	887	891	895	896	896	891	883
6	887	883	883	884	882	884	886	886	884	879	872	864	864	879	893	890	890	887	885	882	885	887	887	890	883
7	889	892	892	889	884	887	886	887	884	884	877	871	872	876	886	902	910	915	906	897	892	888	889	891	889
8	892	894	896	896	892	888	887	886	885	888	879	873	878	881	882	885	897	897	895	891	888	888	888	890	888
9	891	891	892	892	891	888	882	881	878	869	863	859	867	871	891	890	893	901	899	898	892	887	889	889	885
10 d	882	877	879	884	892	891	885	868	850	857	871	871	879	880	908	952	984	997	964	940	924	905	892	893	*901*
11 d	885	893	897	901	900	900	895	892	888	881	873	873	870	875	879	888	884	894	901	899	896	893	887	887	889
12	884	881	872	854	857	874	888	891	891	890	885	882	882	892	903	898	905	906	913	919	919	900	884	879	890
13 d	880	888	890	894	893	893	893	899	875	874	874	893	893	903	898	896	892	918	937	920	909	852	792	743	883
14 d	680	633	586	677	761	800	834	872	897	900	899	894	893	893	888	889	894	896	893	891	894	892	860	857	*836*
15 d	854	837	780	746	759	789	812	832	860	889	889	904	903	909	908	922	920	923	911	897	892	895	892	880	867
16 q	878	872	884	891	892	892	897	896	897	896	899	896	895	898	898	897	893	894	894	897	898	897	895	892	893
17	890	886	884	881	879	886	889	892	892	887	885	891	887	884	891	883	884	902	911	916	880	844	813	746	878
18	734	732	754	744	793	838	870	875	886	896	901	899	895	886	880	880	883	889	891	908	912	904	899	894	860
19	894	893	891	888	891	893	893	893	890	891	892	892	890	885	894	907	903	917	922	911	906	906	896	880	897
20	849	865	872	813	834	866	867	826	849	866	880	891	897	893	903	903	910	912	902	900	898	887	884	789	873
21	785	844	852	862	872	877	872	872	880	886	885	888	895	895	893	896	894	896	891	902	905	900	894	884	880
22	844	853	872	884	888	887	888	888	887	873	881	877	870	881	884	889	890	895	905	898	905	897	853	854	881
23	868	879	879	883	890	894	895	895	895	892	889	881	883	886	885	889	900	903	895	893	892	894	892	890	889
24	890	892	891	889	890	890	885	882	881	877	879	873	870	869	879	890	891	897	900	892	901	893	884	870	886
25	868	871	877	880	886	888	888	886	885	883	880	879	880	882	883	886	885	885	883	886	897	893	885	859	882
26	811	817	839	854	867	873	876	880	877	872	866	858	861	869	878	880	885	888	892	891	893	881	865	862	868
27	858	845	850	862	860	863	866	874	878	877	875	872	875	887	903	901	895	888	883	885	884	893	886	885	877
28	881	866	867	879	887	887	885	882	880	885	883	883	882	878	883	894	895	891	887	887	895	893	889	882	884
29	855	801	835	858	872	875	876	880	883	882	879	869	865	859	860	872	880	885	892	896	899	894	891	883	873
30	872	869	874	876	882	885	885	883	878	874	878	878	874	874	878	879	886	891	891	891	889	890	885	871	881
Mean	860	*858*	860	863	870	876	880	881	882	882	881	881	881	883	888	893	896	*900*	900	899	897	890	880	869	881

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −7γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

27 LERWICK — JUNE 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A
1	18 8	429	364	8 8	65	14 4	12·9	−0·4	2 51	13·3	18 2	905	844	5 18	61	2,3,2,1,2,2,1,2	15	0	84·1
2 q	19 12	425	374	11 46	*51*	15 28	11·1	−0·4	8 4	11·5	9 28	895	871	0 28	24	2,1,1 0,1,1,0,0	6	0	84·0
3 q	18 34	429	355	11 47	74	15 20	12·1	−0·9	7 58	13·0	19 18	900	872	12 6	28	1,0,1,2,1,1,1,0	7	0	84·1
4 q	17 53	440	367	10 41	73	15 41	11·6	−0·8	7 19	12·4	21 58	891	873	14 10	*18*	2,1,1,1,1,1,1,1	9	0	84·1
5 q	17 14	440	359	11 8	81	14 33	12·9	−1·7	7 29	14·6	22 26	898	870	12 14	28	1,1,2,1,1,2,1,1	10	0	84·0
6	19 52	434	348	10 49	86	14 1	14·9	−1·9	10 2	16·8	14 38	897	859	12 10	38	1,1,2,3,3,2,1,1	14	0	84·1
7	14 33	425	371	10 11	54	13 54	16·7	−2·0	6 56	18·7	17 12	918	870	12 10	48	0,1,1,1,2,2,1,1	9	0	84·4
8	15 32	431	346	9 24	85	15 24	12·2	−4·4	9 14	16·6	16 40	898	871	11 32	27	1,1,2,3,2,2,1 0	12	0	84·2
9	21 11	454	347	11 7	107	14 50	18·0	−10·0	9 16	28·0	17 56	905	852	11 44	53	0,0,2,3,3,2,2,2	14	1	84·0
10 d	16 1	*546*	335	7 28	211	15 32	*32·0*	−3·4	4 55	35·4	17 20	*1018*	849	9 9	169	2,2,3,2,5,5,3,3	25	1	84·0
11 d	19 45	486	353	10 18	133	0 20	16·8	−9·6	5 56	26·4	19 25	909	866	11 55	43	4,3,2,2,1,3,3,2	20	1	84·0
12	19 24	474	341	13 31	133	15 37	12·5	−2·6	6 47	15·1	20 4	929	846	4 7	83	2,2,1,2,3,3,3,2	18	1	83·5
13 d	18 0	497	57	23 59	*440*	13 14	21·0	−10·8	22 0	31·8	19 7	951	683	23 49	268	1,3,4,5,5,4,4,6	32	1	82·4
14 d	22 14	466	*47*	0 17	419	22 23	11·6	*−46·4*	2 51	*58·0*	9 24	902	*553*	2 32	*349*	5,5,4,1,2,2,2,4	25	1	82·1
15 d	20 27	443	288	3 11	155	15 47	18·7	−14·7	3 49	33·4	17 24	928	730	3 34	198	4,4,3,4,3,3,3,2	26	1	82·1
16 q	18 52	423	362	12 11	61	17 41	10·1	−1·0	5 37	*11·1*	10 33	900	867	1 44	33	2,0,1,2,1,2,2,2	12	0	83·0
17	18 49	491	236	23 42	255	20 49	20·1	−10·9	23 39	31·0	19 0	926	720	23 41	206	1,1,1,2,2,4,5,5	21	1	83·6
18	19 16	453	126	2 47	327	15 22	15·9	−18·7	1 54	34·6	20 12	919	703	3 13	216	5,6,2,2,2,3,2,1	23	1	84·0
19	19 56	453	355	11 51	98	15 25	17·2	−2·5	22 32	19·7	18 14	928	865	24 0	63	0,1,1,2,2,3,3,3	15	0	84·9
20	20 50	458	279	6 43	179	6 50	26·7	−6·8	1 0	33·5	17 1	920	731	23 37	189	3,3,4,2,3,3,4,5	27	1	85·0
21	18 47	447	343	0 2	104	24 0	12·5	−3·3	6 35	15·8	20 0	908	749	0 0	159	4,2,3,1,3,2,2,2	19	1	85·3
22	19 26	447	339	10 48	108	13 20	14·1	−5·7	6 31	19·8	20 14	907	832	0 33	75	3,1,2,2,3,2,2,3	18	1	86·0
23	18 15	433	374	2 44	59	14 18	12·1	−1·0	7 3	13·1	17 43	904	860	0 0	44	2,2,1,2,2,2,0,1	12	0	86·7
24	16 52	447	355	10 9	92	13 55	17·2	−5·8	23 34	23·0	20 20	908	863	23 42	45	1,0,1,2,2,2,3,3	14	0	87·0
25	19 52	452	363	10 9	89	15 37	12·2	−2·1	0 0	14·3	20 21	901	824	23 59	77	2,1,1,1,2,1,2,3	13	0	87·4
26	19 29	474	354	1 0	120	14 0	16·0	−10·5	0 40	26·5	20 19	899	788	0 39	111	3,2,2,1,2,1,3,2	16	1	87·7
27	18 50	443	341	11 10	102	13 54	19·3	−6·7	2 25	26·0	14 51	906	839	1 55	67	2,3,2,2,2,1,2,1	15	0	87·8
28	19 22	446	363	9 38	83	14 17	14·8	−4·3	5 43	19·1	16 25	900	858	1 55	42	2,2,1,1,2,2,2,2	14	0	87·5
29	18 16	441	347	1 16	94	13 5	15·9	−6·6	5 45	22·5	20 11	901	787	1 16	114	4,2,2,2,2,2,2,1	17	1	87·3
30	18 13	434	358	10 47	76	14 11	12·7	−3·4	6 38	16·1	18 29	891	851	24 0	40	1,1,2,2,2,2,1,2	13	0	87·8
Mean	− −	452	318	− −	134	− −	15·7	−6·6	− −	22·4	− −	912	815	− −	97	−	−	0·47	84·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

28 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	410	392	401	395	389	406	398	383	373	372	371	374	384	395	399	412	422	424	428	423	422	424	411	399	400
2	395	387	373	393	405	403	390	367	365	379	379	379	380	387	395	398	402	411	415	413	420	417	409	405	394
3	408	398	400	403	404	405	405	398	389	382	373	376	391	392	430	433	472	432	421	423	423	419	404	401	408
4 d	398	400	402	409	403	359	401	388	372	373	373	367	372	384	388	432	474	484	542	525	445	392	398	399	*412*
5 d	291	310	80	199	385	389	−118	−433	−235	121	508	562	389	794	827	906	317	259	299	320	348	140	204	304	*299*
6 d	288	277	292	306	311	301	294	297	323	338	353	400	449	554	587	511	481	464	384	330	359	279	307	273	365
7 d	185	151	−39	47	50	323	346	304	314	311	324	339	366	375	385	406	387	403	419	409	404	390	381	380	307
8	376	373	372	372	365	357	334	317	315	357	356	350	349	396	377	417	425	420	418	427	398	381	379	376	375
9	374	371	367	366	370	368	363	354	351	348	343	350	367	363	376	367	399	419	426	411	406	420	410	390	378
10	366	402	373	381	388	384	379	363	350	355	355	353	362	388	409	433	487	487	467	431	357	346	300	373	387
11	387	395	390	385	387	386	386	360	342	351	352	346	350	353	372	380	392	395	398	401	402	398	394	391	379
12	391	392	391	388	393	394	381	362	365	359	346	345	373	362	368	384	385	389	396	401	401	398	396	396	381
13 q	392	388	387	394	394	385	377	365	357	347	345	351	359	372	377	384	389	392	399	401	399	398	397	395	381
14 q	390	385	386	386	385	382	380	379	372	360	351	354	359	355	370	383	395	398	402	407	407	403	395	392	382
15	389	390	386	386	386	384	377	373	372	366	356	354	353	363	387	395	404	404	413	415	415	413	412	409	388
16	402	404	398	394	412	414	403	397	389	386	368	374	388	384	408	384	422	436	426	428	412	399	389	389	400
17	358	380	392	387	367	374	372	369	357	371	375	374	379	383	398	397	396	427	434	422	415	410	396	388	388
18	383	378	386	389	389	391	389	378	365	354	356	361	359	368	375	386	398	409	426	429	412	403	399	392	386
19	389	386	374	386	392	394	390	386	378	363	356	355	363	374	391	403	402	409	406	413	410	411	401	400	389
20	386	386	381	386	386	391	396	381	354	361	366	364	364	364	378	396	417	398	419	415	426	416	403	407	389
21 d	398	387	390	407	416	383	324	323	262	254	300	341	380	382	393	381	386	415	439	461	448	398	389	382	377
22	379	330	292	315	353	368	375	380	371	364	346	351	366	382	411	425	389	412	407	408	407	406	403	396	377
23	395	342	359	352	370	373	359	372	364	355	347	331	366	408	388	389	404	392	397	401	409	404	404	383	378
24	352	381	390	389	380	378	384	384	378	362	355	352	366	381	382	407	398	410	416	423	412	404	396	395	386
25	399	397	404	405	407	407	373	352	358	355	361	364	368	381	419	411	407	404	410	408	401	399	393	387	390
26 q	386	383	381	381	381	383	381	376	371	364	359	354	356	359	376	387	403	410	406	410	409	406	402	397	384
27 q	392	390	392	389	390	393	390	386	377	366	355	346	352	362	376	391	398	410	410	410	414	413	407	401	388
28	395	394	397	398	398	400	397	393	381	364	352	346	355	370	381	399	409	416	417	420	415	411	407	404	392
29 q	400	397	398	404	407	406	403	399	387	371	366	364	363	369	374	387	398	416	423	422	421	415	410	407	396
30	406	403	402	404	401	398	396	387	370	364	351	351	356	374	385	392	401	408	414	417	413	403	396	399	391
31	404	408	410	408	407	403	399	393	384	374	367	364	370	378	387	393	407	405	411	422	419	415	409	396	397
Mean	376	373	358	368	376	383	362	343	*341*	350	360	364	369	395	409	*418*	409	412	416	414	408	391	387	387	382

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −3γ.

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

29 LERWICK (D) — 12° + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·9	0·3	2·4	1·9	7·3	2·3	−2·6	−0·7	1·1	2·8	5·0	8·6	11·2	12·7	14·2	13·5	12·4	11·5	10·7	9·0	8·2	8·0	4·7	4·0	6·3
2	3·9	3·5	10·2	6·8	0·8	0·2	0·1	−0·6	2·9	2·0	2·5	5·2	7·3	8·5	11·0	10·7	9·2	8·1	7·9	7·4	7·3	7·0	6·0	7·1	5·6
3	8·5	5·2	4·5	3·4	1·5	0·4	0·0	0·1	1·3	3·1	5·4	8·0	12·2	14·1	13·9	14·1	12·7	9·5	10·0	10·1	10·1	6·9	6·3	6·3	7·0
4 d	5·9	4·9	4·2	4·5	2·7	9·1	5·2	4·5	5·9	3·4	4·2	9·0	11·4	12·7	13·1	13·2	13·1	12·7	15·8	14·7	10·6	−2·6	7·3	9·0	*8·1*
5 d	7·8	0·9	14·0	−24·7	−6·9	−5·3	4·6	−44·4	−45·4	−16·9	<−88·0	<−123·6	−84·6	−73·0	−46·5	−24·4	13·7	18·1	17·0	14·9	22·0	26·9	15·0	7·2	*−17·6*
6 d	4·7	9·7	6·6	2·9	2·9	1·5	1·1	1·1	0·5	2·0	3·1	1·0	3·8	2·0	4·9	10·8	9·6	12·6	14·5	12·1	6·1	12·2	−0·3	−5·0	5·0
7 d	−7·0	−18·7	8·5	6·8	11·2	2·3	3·0	−1·4	1·3	7·0	8·1	7·9	9·1	9·7	9·5	7·6	7·5	8·1	10·3	9·2	8·0	5·2	3·2	5·3	5·1
8	3·1	1·7	1·1	0·2	−0·5	−0·1	2·9	6·5	6·1	5·5	4·9	7·6	11·9	12·3	9·7	11·4	8·0	6·9	7·7	1·3	6·7	7·7	6·9	5·3	5·6
9	4·6	3·5	2·5	−0·4	−0·2	−1·4	−0·8	−0·4	0·7	2·2	4·3	6·9	9·1	11·1	9·5	9·0	9·5	9·5	9·3	7·8	7·2	8·9	5·4	2·2	5·0
10	7·3	−3·3	−6·4	0·9	2·2	−0·8	0·1	−2·9	−0·5	0·1	2·5	6·3	10·1	13·8	14·6	15·9	14·8	15·0	12·3	10·0	5·1	−7·2	−6·6	−7·6	4·0
11	−0·2	2·5	3·0	0·9	0·7	0·0	1·2	5·2	8·5	8·2	7·9	8·0	10·3	10·7	11·0	10·0	8·9	8·9	8·0	7·5	6·9	6·6	5·4	5·8	6·1
12	5·1	5·1	7·7	4·2	1·8	1·7	2·8	8·1	9·6	5·7	6·8	10·1	11·4	9·8	10·7	9·5	7·6	6·7	6·6	6·5	6·1	5·9	5·2	3·3	6·6
13 q	2·9	2·0	1·5	0·7	−0·3	−2·2	−2·0	−1·4	−1·3	2·0	7·3	10·4	12·2	13·6	12·9	11·4	9·6	8·1	8·1	7·0	6·0	5·9	3·5	3·0	5·0
14 q	2·2	2·2	2·1	1·2	−0·5	−2·2	−1·2	0·2	0·8	2·1	4·0	6·1	8·0	9·5	10·9	10·3	9·8	8·1	6·1	6·1	5·7	1·7	4·7	5·0	4·3
15	4·7	2·9	1·9	0·4	−0·6	−2·2	−3·3	−1·7	−0·3	2·1	5·3	8·9	11·1	11·8	11·1	10·3	10·2	9·6	9·8	8·7	8·0	7·3	6·3	6·1	5·3
16	6·0	3·3	2·6	−1·8	−3·7	−6·4	−2·7	−1·4	−0·4	0·3	4·3	7·7	11·1	13·2	16·5	13·3	14·0	13·1	10·8	9·9	7·0	0·3	−0·6	−2·6	4·8
17	−0·5	4·8	1·7	−0·6	0·4	0·3	−1·9	−2·9	−0·6	2·1	4·3	7·3	9·2	11·2	12·0	11·1	9·7	7·9	3·3	6·4	6·9	5·9	4·5	4·1	4·4
18	10·7	3·2	−1·4	−0·4	−0·6	−2·3	−3·7	−3·7	−3·2	−1·2	2·1	6·0	10·1	11·0	9·6	8·5	8·1	6·2	6·0	6·5	5·5	5·3	3·9	4·1	3·8
19	3·6	3·5	9·0	2·9	−5·1	−4·9	−3·9	−1·8	−1·5	0·6	3·6	8·3	11·9	11·8	11·1	10·0	8·5	8·0	7·6	6·7	5·7	6·5	5·6	0·2	4·5
20	2·7	3·8	0·8	−0·6	−2·9	−2·3	−0·9	−4·7	−2·5	2·0	3·1	7·0	11·1	13·5	12·6	9·1	8·2	6·2	6·1	5·9	0·9	0·4	4·9	5·8	3·8
21 d	5·8	3·9	3·9	−2·4	−3·6	9·1	13·9	7·0	0·1	7·1	8·3	12·1	12·9	13·5	10·6	9·5	8·5	9·1	9·0	3·8	−4·7	4·0	5·6	7·1	6·4
22	3·5	5·2	0·4	1·2	−4·3	−3·0	0·9	−0·2	−0·8	−1·0	1·8	6·2	10·3	11·8	12·0	11·1	6·3	5·9	8·8	8·7	8·6	8·1	7·7	4·2	4·7
23	5·1	7·3	2·5	−0·7	0·0	0·0	3·8	4·1	5·2	3·4	4·7	9·0	11·9	11·7	11·3	10·6	9·1	6·5	6·7	6·9	7·6	6·5	7·0	2·7	6·0
24	−5·7	−3·0	−2·8	−4·7	−5·6	−4·4	−2·5	−2·7	−3·0	−0·7	3·9	8·1	11·1	12·3	9·6	7·1	8·8	8·5	9·2	8·2	5·2	3·9	2·5	4·9	2·8
25	5·0	5·3	4·5	0·8	−1·8	−4·0	−4·2	1·3	3·4	5·0	3·7	5·9	9·8	9·4	10·2	10·8	9·4	7·0	6·8	4·9	5·7	5·2	4·2	4·5	4·7
26 q	4·2	4·0	4·2	2·5	1·2	−0·9	−1·9	−1·9	−0·6	1·2	3·4	7·2	10·7	11·9	12·4	11·8	11·2	10·2	8·9	7·3	5·9	4·9	4·3	2·7	5·2
27 q	3·2	2·2	1·4	0·7	−0·3	−1·8	−2·7	−2·8	−1·9	0·0	2·0	5·4	10·1	12·7	13·5	12·7	9·6	7·1	5·7	5·6	6·1	6·0	3·1	3·9	4·2
28	2·1	1·5	1·1	0·6	−0·9	−1·4	0·2	1·0	2·3	4·0	6·8	10·0	13·8	14·7	14·0	11·8	9·6	8·3	7·7	7·4	6·7	6·1	5·7	4·9	5·7
29 q	4·0	4·3	2·3	2·3	1·1	−0·9	−1·6	−1·7	−1·1	1·1	4·0	8·1	11·7	13·0	13·0	10·9	8·5	6·6	6·1	6·3	6·4	6·7	5·9	7·6	5·2
30	3·8	2·6	2·0	−0·1	−2·2	−3·8	−3·9	−2·6	−0·2	1·5	3·1	7·8	12·1	13·8	13·1	11·8	10·2	8·9	7·5	7·5	7·1	5·4	5·0	3·9	4·8
31	3·4	3·8	3·3	2·2	0·5	−1·6	−0·8	−0·1	−0·8	1·1	4·4	8·1	12·4	13·9	12·4	8·6	7·1	5·8	6·8	7·3	7·0	1·5	−0·7	2·4	4·5
Mean	3·7	2·5	3·2	0·4	−0·2	−0·8	0·0	*−1·3*	−0·5	1·9	1·5	3·4	7·6	9·0	*9·8*	9·7	9·8	9·0	8·7	7·8	6·8	5·7	4·6	3·8	4·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

30 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	834	817	818	845	825	816	842	859	869	864	861	864	866	873	874	869	874	880	885	889	891	887	887	883	861
2	873	868	857	852	874	884	886	889	888	883	877	876	877	877	876	878	879	881	884	886	887	890	891	887	879
3	874	864	878	880	881	881	882	881	881	880	874	870	861	858	858	874	895	923	904	888	883	885	890	884	880
4 d	885	885	884	877	869	819	815	845	857	868	870	873	885	892	888	891	919	961	964	976	956	862	887	877	888
5 d	739	754	469	508	749	842	789	746	808	824	935	787	463	488	431	647	940	909	939	934	938	916	876	897	*764*
6 d	898	902	908	919	922	927	930	928	924	941	943	950	949	927	951	920	895	903	885	850	855	831	827	817	904
7 d	732	639	523	598	606	664	779	849	885	897	902	906	920	930	926	929	936	921	912	911	908	917	908	906	834
8	912	918	915	913	909	900	900	895	899	904	924	930	915	922	954	946	967	948	931	925	913	909	907	908	*919*
9	910	913	914	914	914	913	910	906	902	898	897	889	892	904	912	913	906	907	913	916	909	886	870	842	902
10	788	835	859	881	880	892	894	904	906	902	900	897	895	901	915	927	945	947	937	919	861	783	759	827	881
11	878	885	884	887	901	908	905	912	905	896	898	897	898	903	903	914	923	929	926	923	921	916	912	906	905
12	901	901	894	894	898	900	901	904	891	897	898	897	905	933	911	909	910	905	902	898	896	894	893	891	901
13 q	894	895	897	899	901	904	904	901	901	902	895	890	888	891	894	897	900	904	905	908	905	900	891	882	898
14 q	882	888	893	896	899	900	902	903	901	900	899	895	895	897	892	894	895	899	901	899	900	906	897	893	897
15	893	893	894	898	896	897	898	897	895	893	894	890	887	883	879	887	890	894	894	899	899	899	894	884	893
16	879	872	876	865	868	871	879	884	891	891	894	887	883	884	877	893	890	905	928	921	909	899	883	853	887
17	840	852	871	884	888	885	885	885	893	884	885	885	892	894	888	895	898	897	911	915	911	902	898	890	889
18	858	836	853	877	889	891	895	899	899	899	894	891	891	888	889	892	893	898	900	905	906	902	895	894	889
19	895	895	876	843	866	876	882	885	887	894	891	889	890	890	895	904	908	901	903	901	904	900	887	865	889
20	870	877	884	887	889	891	889	889	894	891	885	888	888	885	878	878	889	902	900	901	905	903	898	893	890
21 d	888	854	820	802	839	846	788	804	859	894	907	902	884	901	921	922	915	914	921	943	916	925	916	894	882
22	874	844	831	843	848	885	881	891	896	903	910	903	907	914	936	955	961	938	916	907	901	895	892	869	896
23	847	814	814	843	853	881	884	881	887	902	914	913	906	934	959	945	930	932	919	910	903	907	896	854	893
24	803	814	838	859	876	890	890	892	892	893	890	888	888	893	910	923	923	920	910	904	909	905	894	884	887
25	874	887	894	901	898	896	901	897	888	886	889	895	901	903	909	918	909	909	905	907	903	898	896	896	898
26 q	896	898	896	893	898	902	903	901	896	890	887	888	893	896	894	897	898	900	897	895	897	898	886	888	895
27 q	893	894	896	896	895	891	890	890	890	889	886	883	880	881	885	887	893	897	901	897	894	894	893	884	891
28	877	876	885	889	893	891	890	887	886	886	890	882	879	880	881	887	891	892	893	895	896	896	895	893	888
29 q	890	891	893	894	896	898	897	892	892	890	884	877	875	877	878	881	888	891	897	896	897	896	892	883	889
30	869	876	878	882	886	888	889	892	888	878	883	883	875	874	880	884	885	889	892	894	898	902	899	895	886
31	890	888	887	890	892	896	897	897	895	890	886	887	883	884	887	891	892	897	894	893	898	899	892	882	891
Mean	866	862	*851*	858	871	879	880	883	889	891	895	889	878	882	885	895	908	*909*	909	907	902	894	887	881	885

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -3γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

31 LERWICK — JULY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				
1	18 5	434	366	9 0	68	14 8	14·8	−5·2	3 1	20·0	20 41	894	810	5 18	84	3,3,2,2,2,1,1,2	16	0	88·2
2	20 24	422	356	7 37	66	2 46	15·2	−2·1	7 32	17·3	7 45	894	840	3 7	54	3,3,2,1,2,1,1,0	13	0	88·4
3	16 40	494	369	10 56	125	14 0	15·4	−0·7	5 37	16·1	17 15	927	850	14 12	77	2,1.0,1,3,4,2,2	15	1	88·0
4 d	18 59	562	302	5 30	260	19 10	22·5	−8·7	21 7	31·2	20 25	998	791	5 51	207	1,4,3,2,3,4,5,4	26	1	87·3
5 d	14 52	*1435*	*−753*	7 19	*2188*	14 53	*82·4*	*−183·7*	11 2	*266·1*	21 15	*1235*	*−52*	14 50	*1287*	7,7,9,8,9,8,6,8	62	2	87·0
6 d	14 59	663	213	21 50	450	18 36	34·9	−11·7	16 2	46·6	14 14	976	774	24 0	202	3,2,3,4,6,5,5,4	32	1	87·0
7 d	18 6	483	−296	2 0	779	2 48	40·2	−28·2	2 16	68·4	16 28	945	384	2 44	561	7,7,4,3,2,4,4,2	33	2	86·7
8	16 7	455	300	8 27	155	13 30	13·6	−9·4	19 33	23·0	16 44	976	891	7 15	85	1,2,2,3,3,3,4,1	19	1	86·9
9	18 28	458	330	24 0	128	13 30	13·6	−4·2	23 22	17·8	18 58	928	808	24 0	120	1,1,1,2,3,3,3,4	18	1	87·6
10	17 4	506	265	22 46	241	15 59	17·5	−17·7	23 0	35·2	16 53	956	725	22 46	231	4,3,2,2,3,3,5,4	26	1	88·1
11	20 12	408	333	8 9	75	14 4	11·2	−1·5	5 45	12·7	17 51	930	865	0 2	65	2,2,3,2,1,1,1,1	13	0	88·3
12	20 28	409	337	11 32	72	12 54	12·1	1·1	5 32	*11·0*	13 30	941	887	8 40	54	2,1,3,2,3,1,2,1	15	0	89·0
13 q	19 28	405	337	10 0	68	13 40	14·2	−2·8	6 0	17·0	20 4	908	878	24 0	30	1,0,1,2,2,1,1,2	10	0	89·3
14 q	20 53	413	349	11 7	64	14 34	11·1	−2·8	5 21	13·9	21 33	908	878	0 0	30	1,0,1,1,2,1,2,2	10	0	88·9
15	18 43	420	342	10 56	78	14 50	12·4	−4·3	6 17	16·7	3 58	899	874	14 52	25	1,1,1,2,3,2,1,1	12	0	88·2
16	17 41	444	361	10 19	83	14 37	19·4	−9·7	5 54	29·1	18 47	933	848	23 34	85	2,3,2,2,3,3,2,3	20	1	88·1
17	17 36	443	325	0 40	118	14 31	12·5	−4·3	0 22	16·8	19 43	916	828	0 27	88	3,2,2,2,2,3,2,2	18	1	88·1
18	19 0	438	349	13 2	89	0 12	11·6	−5·4	13 23	17·0	20 21	908	828	1 15	80	3,1,1,2,2,2,2,1	14	0	88·0
19	19 8	420	351	12 17	69	13 13	13·0	−5·8	5 20	18·8	16 9	914	838	3 22	76	3,3,1,1,2,2,2,3	17	0	87·8
20	18 30	436	345	8 42	91	13 59	14·4	−5·5	8 8	19·9	20 48	914	868	0 0	46	2,2,2,2,2,3,3,3	19	1	87·3
21 d	20 0	517	210	9 19	307	6 21	19·3	−15·8	20 3	35·1	19 21	982	763	6 37	219	4,4,4,5,3,3,4,3	30	1	87·0
22	15 29	467	249	2 8	218	13 36	13·6	−11·3	4 52	24·9	16 11	966	805	2 3	161	4,4,2,2,3,4,1,2	22	1	87·0
23	20 56	418	316	1 44	102	12 52	13·1	−5·3	24 0	18·4	14 33	961	787	2 2	174	4,3,2,3,3,2,2,4	23	1	87·1
24	19 30	436	325	0 9	111	13 24	12·9	−7·2	0 27	20·1	15 43	929	792	0 43	137	3,3,2,2,2,3,2,2	19	1	87·0
25	14 53	428	345	7 46	83	15 23	11·2	−8·0	6 24	19·2	15 18	922	842	0 21	80	2,2,3,2,3,3,2,1	18	1	87·0
26 q	17 28	414	352	11 55	*62*	14 42	12·6	−3·4	7 21	16·0	6 14	906	881	22 33	25	1,1,1,1,1,1,2,2	10	0	87·0
27 q	20 36	416	344	11 52	72	14 38	13·9	−3·3	7 20	17·2	18 4	902	875	24 0	27	1,1,0,2,1,2,1,2	10	0	87·0
28	19 34	425	343	11 9	82	13 24	15·6	−1·8	5 40	17·4	20 10	897	875	0 5	*22*	1,0,0,1,1,1,1,1	6	0	87·0
29 q	17 59	426	360	12 40	66	14 7	14·0	−2·7	6 46	16·7	5 29	900	862	24 0	38	1,1,1,1,1,2,0,2	9	0	87·0
30	19 21	420	345	10 25	75	13 20	14·2	−5·4	5 9	19·6	21 41	906	862	0 0	44	1,1,1,2,2,1,1,1	10	0	86·8
31	19 43	432	356	11 33	76	13 24	14·5	−6·6	22 32	21·1	20 46	904	876	24 0	28	1,1,1,1,1,2,2,3	12	0	86·7
Mean	− −	482	272	− −	210	− −	18·0	−12·4	− −	30·3	− −	938	795	− −	143	−	−	0·58	87·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

32 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	403	400	401	400	401	398	397	391	370	363	367	372	375	384	389	400	411	417	427	449	437	409	393	386	397
2 d	390	378	343	396	408	403	356	342	326	332	344	367	381	409	427	574	585	537	502	454	408	383	353	352	*406*
3	352	359	378	377	374	359	337	352	348	342	341	348	359	375	393	427	437	482	430	416	409	395	383	381	381
4 d	377	353	354	409	238	305	343	313	291	279	288	358	474	733	964	795	808	612	464	437	266	199	56	-108	400
5	-178	159	155	296	362	368	372	351	336	327	334	355	380	409	454	470	480	457	427	424	418	392	393	371	346
6	378	378	382	378	365	363	300	338	331	342	361	372	378	409	424	470	418	431	464	451	436	389	361	143	378
7	142	273	345	367	358	365	374	355	344	337	345	348	358	372	389	398	419	426	417	408	403	402	400	397	364
8	381	384	387	386	381	375	371	372	368	365	357	358	357	365	383	398	395	395	398	409	403	397	394	392	382
9 q	393	393	389	390	389	385	381	375	364	352	349	358	365	372	379	388	397	398	403	407	408	409	403	398	385
10 q	394	393	390	391	393	392	390	388	381	368	361	355	354	366	383	392	400	406	415	418	416	415	416	407	391
11	406	395	408	403	406	399	392	384	374	369	369	365	374	375	392	412	410	420	443	427	411	403	398	395	397
12	394	396	397	398	397	390	387	382	374	362	358	360	374	381	381	389	400	408	412	415	416	410	404	409	391
13	395	389	394	394	399	392	389	385	376	365	362	362	371	381	389	411	419	409	418	416	414	411	408	415	394
14	409	402	398	389	364	392	400	389	374	362	355	354	367	380	390	402	414	414	408	409	407	404	404	399	391
15	400	403	393	393	397	392	386	380	374	367	365	369	385	387	396	393	396	398	401	402	400	397	396	395	390
16 q	394	393	393	394	394	392	388	385	377	368	365	358	352	382	381	384	391	405	417	413	404	402	399	398	389
17 q	398	400	401	390	394	394	392	386	379	368	362	358	363	370	383	391	396	398	405	409	408	407	405	403	390
18	397	398	399	399	397	394	388	385	382	380	382	379	390	400	399	421	408	400	415	421	420	402	387	409	398
19	402	409	399	409	408	398	392	372	362	362	352	360	325	356	374	400	434	399	410	402	400	402	402	397	389
20	392	385	392	396	395	396	386	376	368	364	360	368	381	388	399	402	406	416	410	410	407	405	403	402	392
21	399	405	398	390	390	391	391	386	383	371	368	368	370	373	382	382	405	403	427	424	407	405	402	406	393
22	392	393	397	397	396	394	388	384	379	371	359	359	367	385	390	392	396	398	407	410	415	402	399	396	390
23 q	396	396	401	402	399	394	391	381	377	370	364	356	361	366	373	382	396	403	409	413	413	412	411	402	390
24	400	394	398	400	405	391	388	385	368	348	354	363	372	380	390	392	406	415	421	416	408	407	398	392	391
25	394	397	399	398	397	392	387	374	360	350	359	364	378	389	402	408	408	430	452	439	409	405	397	387	395
26 d	349	361	409	400	399	391	392	392	367	348	346	346	342	354	420	431	445	486	469	429	370	325	289	121	374
27 d	-126	-18	288	363	400	353	362	331	305	316	281	345	400	442	493	507	434	422	448	408	356	252	278	322	*332*
28	221	342	373	354	363	371	379	333	312	316	316	354	344	375	381	381	389	401	406	405	399	396	400	389	363
29 d	380	360	375	375	330	376	393	381	367	327	354	362	388	400	415	405	452	499	434	422	391	354	371	346	386
30	167	350	373	359	353	385	390	384	373	360	362	365	358	378	411	412	414	408	415	418	403	389	392	385	375
31	390	391	389	371	362	352	367	386	386	375	372	382	374	384	392	405	409	401	410	408	404	411	408	396	389
Mean	*335*	362	377	386	381	382	379	372	361	352	352	361	372	394	417	426	*432*	429	425	419	402	387	378	358	385

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

33 LERWICK (D) — 12° + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	2·5	2·1	2·2	2·3	1·2	0·1	-0·2	0·5	1·7	7·7	6·7	8·0	12·6	14·9	13·5	12·8	10·3	9·0	8·9	5·7	8·0	4·3	5·7	3·6	6·0
2 d	6·2	-0·9	11·2	2·5	2·3	2·6	4·7	12·0	7·5	6·9	10·3	8·9	12·7	11·1	8·3	0·1	7·2	12·3	12·7	10·6	11·8	13·9	11·8	12·5	*8·3*
3	8·5	5·1	0·4	-0·1	0·2	2·2	5·7	5·1	2·2	3·0	3·1	4·7	9·2	11·1	9·3	8·6	3·8	1·0	5·5	5·0	5·0	1·1	4·5	5·0	4·5
4 d	3·9	1·2	-9·4	-4·4	-3·7	-6·7	-2·1	-10·7	-1·9	8·0	6·9	3·5	-5·0	-11·3	4·5	20·8	21·0	12·6	11·6	12·1	20·2	-6·8	-4·8	-33·1	1·1
5	-1·1	-15·0	-8·7	-13·1	-8·2	-8·5	-7·6	-4·7	-1·5	-0·1	2·6	6·3	11·0	13·8	13·9	15·1	11·7	9·9	8·4	8·1	0·0	3·7	3·1	5·0	1·8
6	2·3	2·6	-1·9	-1·2	-3·6	-5·0	3·0	-0·4	1·3	2·6	6·9	10·9	14·0	14·5	14·3	11·1	9·7	9·4	7·2	6·4	8·4	5·3	2·7	8·4	5·4
7	-15·0	-18·4	-9·5	-8·2	-3·6	-2·3	-1·4	1·2	2·4	4·9	6·6	10·9	12·5	13·8	12·9	10·3	7·8	4·5	4·9	8·2	7·9	6·0	-1·0	3·5	2·5
8	1·5	1·9	1·2	0·1	0·1	0·0	1·2	0·4	1·0	1·1	3·3	7·3	10·5	11·1	10·9	9·0	5·7	5·0	4·5	5·2	4·5	2·7	4·1	3·1	4·0
9 q	3·3	3·0	3·0	2·0	1·2	-0·2	-1·5	-2·6	-2·9	-1·9	2·0	7·0	10·9	12·0	11·0	8·6	7·7	6·9	5·6	5·5	5·5	5·1	2·2	3·9	4·1
10 q	3·1	2·7	5·0	3·0	1·2	-0·3	-1·0	-1·2	-1·1	1·0	4·0	7·9	10·8	12·1	11·7	10·1	8·1	6·4	5·9	5·5	5·8	5·6	4·7	4·2	4·8
11	1·4	-2·9	-0·9	-1·1	-0·9	-3·5	-5·2	-5·6	-2·7	1·0	3·9	8·2	11·7	13·5	13·9	12·8	9·7	7·9	7·6	3·2	4·3	4·5	3·1	-0·9	3·5
12	1·4	0·9	1·3	1·0	-1·5	-3·6	-1·6	-1·2	-1·0	2·0	5·6	9·3	12·6	14·0	11·9	10·6	9·1	6·3	5·0	5·6	6·4	4·1	3·0	-0·2	4·2
13	-2·0	-1·2	1·2	2·4	-0·6	-3·5	-2·0	-1·0	-1·1	0·4	3·7	7·6	11·9	12·8	12·2	12·6	10·8	7·3	4·7	6·0	6·1	5·6	6·4	5·3	4·4
14	-1·2	-1·7	0·2	-0·8	2·3	2·1	0·0	-1·1	0·7	2·5	4·1	8·2	11·4	13·1	12·1	10·7	8·3	6·2	5·5	5·8	4·6	3·6	4·3	4·8	4·4
15	4·9	1·2	-1·1	-1·8	-3·0	-3·4	-1·8	-0·6	0·2	2·7	5·6	8·5	11·2	12·2	11·0	8·4	7·2	5·8	4·7	5·0	4·9	4·6	4·2	3·7	3·9
16 q	3·6	3·3	3·0	2·5	1·7	1·1	-0·1	0·4	0·8	1·3	3·7	7·7	10·5	13·1	11·9	10·3	8·3	6·5	4·0	3·1	3·5	4·2	4·2	3·1	4·7
17 q	3·3	2·9	-0·9	-1·2	0·4	-0·8	-0·9	-0·8	-0·4	1·1	3·6	6·5	9·3	9·8	10·0	8·1	6·2	4·9	4·5	4·7	4·9	5·0	4·7	2·1	3·6
18	1·9	2·2	2·0	1·7	0·7	0·0	-0·4	0·1	1·1	3·7	5·0	8·0	9·9	11·0	9·9	10·8	9·9	8·1	7·6	8·5	5·2	-0·9	2·0	3·6	4·7
19	2·6	2·0	2·5	-3·6	-1·1	-1·1	-2·0	-3·6	0·2	5·8	8·0	8·7	15·4	15·6	13·6	8·2	6·7	2·0	5·5	5·7	5·0	3·3	5·4	1·6	4·4
20	2·5	6·6	5·7	1·3	-0·2	-0·6	-2·4	-1·0	1·6	3·4	7·0	9·0	10·9	12·0	11·1	8·1	5·0	4·3	5·6	6·2	6·0	5·9	5·8	4·7	4·9
21	7·9	2·9	1·1	2·0	1·4	1·7	-1·1	-0·8	0·5	4·7	6·7	8·6	12·1	13·5	12·3	10·0	7·7	5·6	8·0	2·3	5·4	6·3	5·5	4·7	5·4
22	1·5	2·2	2·3	1·3	1·2	0·9	0·2	-0·2	-0·3	1·0	3·5	7·3	11·2	12·6	12·0	11·0	9·1	7·0	5·6	5·3	4·6	3·4	2·5	2·9	4·5
23 q	3·1	2·6	2·3	2·4	1·3	0·4	-0·3	-0·8	-0·4	1·5	4·4	8·6	12·0	13·6	12·9	11·1	8·4	5·9	4·8	4·9	4·0	5·5	3·2	1·4	4·7
24	0·6	1·1	0·1	-1·1	-1·4	-3·2	-3·4	-1·5	1·2	3·8	7·9	11·5	14·0	14·1	12·0	9·3	7·8	6·3	5·5	3·6	0·6	2·5	3·2	1·8	4·0
25	1·9	2·8	2·2	1·2	0·2	-1·0	-0·7	0·0	1·7	5·4	9·0	11·1	13·0	12·1	10·3	8·6	6·6	6·8	8·0	-0·7	-1·3	1·5	2·1	4·2	4·4
26 d	6·1	3·3	-0·8	0·2	-1·2	-1·3	0·8	1·0	3·9	10·6	12·5	14·9	19·8	19·6	16·0	12·8	11·9	12·1	5·2	5·0	-5·4	-8·6	-24·1	-21·2	3·9
27 d	-22·1	-2·7	2·0	-3·0	-3·3	-0·2	3·2	4·1	4·2	4·9	4·7	5·2	7·1	13·3	14·6	11·1	9·6	7·2	-2·2	-9·1	-6·7	1·1	-14·7	-5·3	*1·0*
28	5·5	5·2	-0·4	-2·3	1·6	-1·1	-3·2	2·8	7·5	7·1	4·5	9·3	13·8	13·8	10·5	7·5	5·3	3·2	1·7	4·1	6·0	5·2	4·0	3·1	4·8
29 d	1·1	0·7	1·5	1·1	2·1	2·5	-1·9	-0·8	0·1	4·7	6·8	8·1	9·8	11·3	5·7	5·8	5·5	-4·7	2·5	2·1	-0·7	3·3	0·5	4·1	3·0
30	5·0	-14·8	-4·4	1·1	-2·2	-3·4	-2·2	-1·9	-0·4	1·1	5·9	7·5	9·9	9·7	2·2	4·7	5·5	5·4	4·5	-1·4	1·8	5·3	4·6	9·0	2·2
31	4·5	6·8	0·0	-0·9	-0·2	-0·6	1·2	0·0	-0·9	2·5	6·1	10·2	13·2	13·3	10·7	9·3	7·5	5·4	5·9	5·2	-1·8	7·1	2·3	2·0	4·5
Mean	1·6	0·2	0·4	-0·5	-0·5	-1·2	-0·7	-0·4	0·8	3·4	5·6	8·4	11·3	12·2	11·2	9·9	8·4	6·3	5·8	4·8	4·3	3·7	2·1	1·6	4·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

34 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	872	872	880	888	893	896	893	892	897	892	886	879	873	878	885	889	895	908	917	917	904	889	880	881	890
2 d	868	825	840	772	819	852	882	872	883	885	890	903	908	910	974	1064	1038	1001	985	967	943	903	876	865	*905*
3	868	872	885	893	893	890	878	876	890	893	898	909	915	918	921	925	948	940	925	924	918	898	889	896	903
4 d	884	796	741	807	737	603	705	812	849	864	885	943	1012	1098	895	970	957	985	981	954	829	779	639	798	*855*
5	786	652	604	720	840	884	904	913	915	912	909	902	902	908	926	952	959	952	942	930	930	915	905	870	876
6	873	889	889	893	889	890	876	862	884	894	899	909	908	912	914	931	952	933	942	931	909	897	882	784	898
7	716	709	778	854	890	883	896	909	912	910	906	903	900	899	904	911	933	945	932	910	904	896	894	863	882
8	879	891	899	905	906	903	904	901	897	892	895	900	895	898	902	906	910	909	908	903	904	907	903	902	901
9 q	901	900	902	905	907	906	903	903	904	902	895	883	888	894	895	900	905	905	905	903	902	898	895	894	900
10 q	897	900	898	899	902	905	904	904	901	895	894	890	891	890	892	895	898	903	902	900	900	897	896	897	898
11	892	894	890	895	902	904	901	902	899	893	885	876	870	878	883	887	899	906	908	926	919	910	905	900	897
12	898	895	889	883	894	900	898	897	895	897	897	893	891	897	899	901	902	902	903	902	899	899	899	875	896
13	874	885	889	892	893	899	901	901	900	889	886	888	884	889	897	897	905	917	916	908	905	901	896	846	894
14	856	873	884	889	882	869	876	886	891	892	887	883	880	886	894	897	901	910	910	906	906	905	901	898	890
15	890	878	873	884	887	890	894	894	896	897	892	889	885	888	889	895	896	899	901	900	901	900	900	900	892
16 q	899	899	898	898	899	900	899	896	895	894	894	890	882	876	887	896	900	901	905	910	905	901	901	900	897
17 q	898	891	883	891	891	895	896	895	895	892	890	889	890	890	890	894	897	899	897	896	896	896	896	895	893
18	896	897	896	896	896	896	892	889	888	886	884	883	880	884	890	892	902	900	895	896	902	907	901	895	893
19	887	881	870	858	878	879	879	886	883	884	886	891	902	912	927	930	946	950	919	912	905	903	897	869	897
20	885	890	884	892	899	896	897	898	898	897	897	896	902	908	910	911	912	909	907	903	903	901	897	892	899
21	884	875	892	897	893	890	887	882	876	874	874	874	878	884	893	902	906	911	902	923	914	901	896	876	891
22	883	894	894	898	900	900	900	899	896	893	893	888	881	884	890	896	898	896	893	895	896	898	896	896	894
23 q	896	897	897	897	901	902	902	900	897	896	895	890	884	885	889	890	893	896	893	888	891	891	885	884	893
24	882	888	891	895	897	904	903	897	893	889	884	880	882	887	896	902	900	904	907	912	911	897	896	889	895
25	890	892	895	900	903	904	903	903	901	896	884	879	880	890	894	899	901	899	913	939	921	915	897	853	898
26 d	790	765	849	887	896	899	892	890	890	886	883	894	899	905	920	950	980	1033	1020	986	874	843	757	648	885
27 d	631	662	693	787	846	839	866	875	891	909	959	992	1010	979	1037	1034	1009	988	972	929	885	809	694	771	878
28	706	780	838	875	900	900	912	914	907	908	942	941	924	928	932	926	928	936	933	925	915	906	885	882	898
29 d	872	862	868	891	860	861	881	895	904	922	921	910	907	925	966	957	966	985	964	956	871	840	876	810	903
30	713	806	830	826	811	854	876	897	908	917	913	911	913	922	940	940	936	932	929	923	892	889	890	864	885
31	872	882	888	899	892	880	875	881	897	902	900	897	900	897	899	906	913	928	920	918	920	897	886	894	898
Mean	853	*851*	858	873	881	880	886	891	895	895	897	899	901	906	911	921	925	*928*	924	919	902	890	875	864	893

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

35 LERWICK — AUGUST 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				°A
1	19 29	462	10 12	361	101	13 13	15·4	8 10	−0·8	16·2	19 15	925	1 0	867	58	1,1,2,2,2,2,3,3,	16	0	87·6
2 d	16 5	655	2 50	284	371	2 47	22·1	15 48	−6·4	28·5	15 57	1094	3 4	721	373	4,4,3,4,4,5,4,4	32	1	88·1
3	17 22	513	6 24	321	192	13 26	11·5	21 40	−8·7	20·2	16 59	966	0 2	857	109	3,3,3,2,2,4,3,3	23	1	87·9
4 d	14 28	*1314*	23 36	−297	*1611*	20 39	*51·2*	23 28	*−80·9*	*132·1*	13 15	*1150*	4 56	540	610	5,7,5,5,7,7,7,7	50	2	87·1
5	16 56	491	0 37	*−338*	829	0 19	35·0	0 55	−43·3	78·3	16 24	967	1 58	557	410	7,6,2,3,3,3,3,3	30	2	86·5
6	15 49	496	23 44	−10	506	23 41	28·7	23 8	−9·3	38·0	16 24	957	23 34	729	228	2,3,4,3,3,4,3,7	29	1	86·0
7	17 4	449	0 40	63	386	13 6	14·7	0 57	−38·0	52·7	16 50	951	0 29	663	288	6,3,3,2,2,3,2,3	24	1	85·3
8	19 44	417	11 6	352	65	13 14	11·3	5 21	−0·5	*11·8*	16 14	912	0 0	863	49	2,1,2,1,2,2,2,1	13	0	85·1
9 q	21 31	417	10 51	344	73	13 36	12·8	7 15	−4·4	17·2	4 50	909	11 45	880	29	1,0,2,2,2,1,1,1	10	0	85·0
10 q	19 20	420	12 31	353	67	13 45	12·5	7 48	−1·9	14·4	5 13	905	12 10	889	*16*	2,1,0,1,1,1,1,1	8	0	85·0
11	18 31	451	11 35	359	92	14 20	14·8	7 1	−7·7	22·5	19 16	931	12 35	868	63	3,1,2,2,2,2,3,2	17	0	84·9
12	23 20	422	10 40	348	74	13 7	15·5	5 35	−5·5	21·0	22 11	906	23 49	866	40	2,2,1,1,2,1,1,2	12	0	85·0
13	16 24	444	10 0	351	93	13 48	14·0	5 47	−4·5	18·5	16 58	920	23 43	830	90	2,2,2,2,2,3,1,3	17	0	85·7
14	17 30	421	10 51	347	74	13 37	13·6	1 34	−3·6	17·2	18 11	915	0 0	840	75	3,3,2,1,1,2,1,1	14	0	85·9
15	1 31	412	10 25	360	*52*	13 31	12·6	4 40	−4·2	16·8	20 5	902	2 19	868	34	2,1,1,1,2,1,1,0	9	0	86·0
16 q	18 57	427	12 33	345	82	13 34	14·0	6 56	−0·4	14·4	19 17	911	13 31	874	37	0,0,1,2,2,1,2,1	9	0	86·8
17 q	19 21	415	11 22	354	61	14 19	10·5	2 47	−2·4	12·9	17 9	900	2 11	877	23	2,2,0,1,1,1,1,1	9	0	86·6
18	20 35	431	11 26	374	57	13 29	11·4	21 5	−3·3	14·7	21 4	912	12 35	877	35	0,0,1,1,2,2,3,2	11	0	86·6
19	16 30	457	12 20	312	145	12 41	18·6	7 11	−6·7	25·3	17 0	965	3 2	837	128	2,3,2,3,3,4,2,3	22	1	86·0
20	17 21	418	10 48	358	60	13 40	12·5	6 38	−3·4	15·9	16 43	914	0 5	875	39	2,1,2,1,1,1,1,1	10	0	87·3
21	18 37	448	10 44	358	90	13 24	14·9	6 30	−2·5	17·4	19 41	933	1 10	865	68	3,2,1,1,2,3,3,2	17	0	88·0
22	20 18	425	11 21	355	70	13 21	12·8	7 30	−0·8	13·6	21 4	906	0 0	876	30	2,1,1,1,1,1,2,2	11	0	88·0
23 q	22 9	417	11 24	354	63	13 22	13·7	7 55	−1·0	14·7	5 1	902	24 0	880	22	1,0,1,1,1,1,1,2	8	0	88·0
24	19 26	428	9 16	344	84	13 31	15·0	5 57	−5·2	20·2	20 4	919	12 19	878	41	1,2,2,2,2,2,2,2	15	0	88·0
25	19 17	467	9 37	349	118	12 44	13·7	19 51	−5·8	19·5	19 41	950	24 0	811	139	1,0,1,2,2,3,3,4	16	1	88·1
26 d	17 57	531	24 0	−98	629	0 50	22·0	23 59	−54·3	76·3	17 55	1085	23 54	586	499	5,2,2,1,4,5,5,7	31	2	88·0
27 d	15 26	564	0 33	−313	877	1 32	21·4	0 31	−43·8	65·2	14 43	1091	*458*	0 29	*633*	8,4,4,4,4,5,5,6	40	2	86·9
28	22 35	422	0 10	171	251	0 42	16·1	3 32	−7·1	23·2	10 39	967	652	0 53	315	5,3,3,4,3,2,2,3	25	1	87·0
29 d	17 25	527	24 0	229	298	14 0	15·6	17 24	−17·4	33·0	17 16	1027	688	24 0	339	2,4,3,4,3,4,5,5	30	1	87·0
30	14 41	451	0 40	122	329	0 36	17·3	1 23	−18·4	35·7	15 0	950	671	0 22	279	6,4,3,2,3,2,4,3	27	1	87·3
31	16 53	433	5 21	346	87	13 20	15·6	20 41	−4·8	20·4	17 30	934	859	0 0	75	3,2,3,2,2,3,3,3	21	1	87·7
Mean	− −	485	− −	231	254	− −	17·1	− −	−12·8	29·9	− −	954	− −	787	167	−	−	0·58	86·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

36 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	387	386	388	384	388	393	370	373	363	350	355	361	359	373	408	379	424	469	430	413	397	398	397	408	390
2	384	388	388	388	390	387	373	361	366	357	346	354	368	378	380	380	407	414	410	413	417	404	395	369	384
3	370	388	387	390	392	390	386	376	367	356	357	359	366	373	381	388	391	395	402	404	402	396	398	396	384
4 q	389	395	390	390	387	384	382	376	367	359	357	361	369	378	383	393	393	400	405	404	401	407	398	397	386
5 q	396	393	393	392	390	385	384	378	370	358	356	364	370	384	387	391	395	395	398	402	402	401	400	399	387
6 q	398	397	395	394	393	393	391	386	378	367	356	351	370	387	395	396	395	400	403	412	407	410	407	406	391
7	406	404	403	402	407	407	402	401	395	383	366	370	396	409	401	396	423	407	408	408	403	384	394	393	*399*
8	387	387	374	388	398	395	391	381	374	366	358	364	373	381	385	393	390	400	405	410	412	386	387	377	386
9	387	398	387	391	394	394	392	391	379	365	362	361	367	377	383	389	395	405	405	405	403	401	401	394	389
10	399	404	390	384	394	390	391	381	370	362	359	363	364	376	385	398	402	406	410	406	406	403	400	399	389
11	397	400	399	401	396	398	390	383	376	366	354	356	363	377	384	381	398	408	405	403	400	402	401	384	388
12 q	394	396	387	389	394	394	392	387	374	362	354	357	365	372	381	387	391	396	398	400	401	400	400	399	386
13 d	400	399	398	396	395	392	388	383	379	375	377	384	392	421	443	390	414	425	423	401	396	365	335	325	391
14	344	340	309	321	345	372	334	328	336	347	351	356	361	374	385	378	403	407	408	403	390	370	373	343	362
15 d	298	347	377	388	378	369	367	372	361	360	356	365	363	387	389	409	406	412	449	413	359	319	389	393	376
16	356	267	386	395	378	369	389	386	377	371	362	355	354	364	379	384	389	410	420	402	387	391	374	369	376
17	380	375	384	392	390	383	381	380	362	355	349	351	363	368	377	385	396	409	405	397	401	403	402	402	383
18 d	399	394	388	386	401	440	429	384	282	320	329	469	632	994	896	696	739	339	-218	-375	-481	-290	-519	-1014	251
19 d	-906	-592	-978	-914	-1063	-736	-600	-210	73	261	331	347	365	346	379	399	388	411	468	367	31	326	368	313	*-34*
20 d	238	175	270	294	318	363	354	332	308	277	302	420	422	423	366	364	351	354	363	369	368	366	360	363	338
21	363	363	360	224	269	357	341	324	316	312	329	346	357	383	386	464	411	360	362	365	364	363	364	367	352
22 q	369	368	369	370	364	357	356	352	349	345	338	338	338	343	350	359	366	380	386	382	378	377	377	378	362
23	378	380	378	378	377	377	376	366	345	339	332	335	355	372	403	436	446	457	388	382	382	377	378	372	380
24	353	378	381	367	346	360	375	368	362	347	340	346	355	353	364	391	396	404	424	383	346	236	258	-69	340
25	154	342	373	374	375	383	387	373	343	332	331	348	346	384	420	398	394	398	392	396	371	369	370	379	364
26	374	378	377	378	378	379	377	372	363	347	338	334	340	347	357	363	371	377	384	387	386	387	388	381	369
27	369	383	379	381	377	380	363	359	357	340	337	339	344	362	357	379	391	393	385	384	386	387	386	388	371
28	387	383	380	377	378	381	378	377	372	361	356	353	355	365	378	387	385	400	400	387	392	380	392	394	379
29	391	388	388	377	383	377	385	383	368	351	332	345	358	378	381	399	400	391	390	394	391	368	401	384	379
30	378	329	337	381	382	383	383	377	365	361	357	333	346	360	373	385	380	385	393	392	397	381	378	384	372
Mean	324	338	331	332	330	347	347	353	350	348	348	359	373	396	401	401	*408*	400	383	370	350	356	352	*319*	359

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

37 LERWICK (D) — 12° + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	2·9	2·4	3·6	0·9	0·4	-2·9	-2·2	-1·0	0·1	1·9	3·0	7·6	10·6	12·8	13·8	11·3	4·8	2·7	0·9	2·4	4·3	3·9	3·8	3·0	3·8
2	4·7	6·4	1·5	0·2	-0·9	-2·3	-5·1	-1·6	0·9	1·0	5·5	8·7	10·2	11·2	9·0	6·2	3·4	4·1	4·4	4·0	1·5	3·8	2·5	5·0	3·5
3	10·0	3·8	0·8	-0·6	-1·4	-1·4	-1·9	-1·6	0·6	3·3	6·2	9·0	10·6	10·5	9·0	6·9	5·0	4·2	4·4	4·3	3·9	4·0	4·5	2·1	4·0
4 q	3·2	2·5	0·8	-0·5	-0·5	-1·0	-2·0	-2·7	-0·7	2·7	6·2	8·9	10·8	10·7	8·9	6·1	4·1	3·6	5·0	6·0	5·4	3·1	1·1	2·5	3·5
5 q	2·4	1·0	1·6	1·1	0·3	0·2	-0·1	-1·0	-0·1	3·2	5·6	8·4	9·2	8·9	8·0	6·1	4·8	4·2	4·4	4·6	4·5	4·5	3·6	3·5	3·7
6 q	2·8	1·9	1·6	1·1	1·0	1·0	0·9	0·3	0·7	2·4	5·9	8·5	10·5	11·1	10·6	7·9	6·6	6·2	6·0	6·1	6·2	3·6	3·4	3·2	4·6
7	3·2	2·5	2·0	2·5	1·2	-1·5	-1·6	-3·3	-3·1	1·4	4·4	9·2	13·8	17·2	18·5	10·3	11·6	8·2	4·5	6·7	3·6	-9·2	0·4	0·9	4·3
8	2·5	1·1	-0·3	-5·2	-3·0	-2·8	-1·9	0·8	0·6	2·2	3·7	6·4	9·4	10·0	8·9	9·0	7·5	5·4	5·0	4·8	1·1	2·0	-1·5	-6·9	2·5
9	0·7	-1·3	3·8	-0·8	-0·8	-0·9	-0·2	1·1	0·9	1·0	3·7	5·9	8·4	9·3	8·6	7·4	5·6	5·1	4·5	3·9	2·4	1·8	0·7	9·4	3·3
10	0·6	-2·7	0·8	1·5	2·0	1·4	0·3	-0·8	-0·6	1·0	3·6	7·0	9·5	10·5	9·9	8·2	5·5	4·5	2·9	0·9	3·9	4·5	3·9	3·5	3·4
11	3·2	3·4	-0·1	-0·2	-0·9	-2·7	-3·0	-2·1	-2·0	1·0	4·0	9·6	14·5	16·8	14·8	11·0	6·7	5·2	4·2	2·7	2·6	0·2	-0·6	3·5	3·8
12 q	4·0	2·1	3·6	4·2	2·0	1·0	0·6	-0·3	0·6	1·9	5·9	8·7	11·1	11·7	10·3	7·0	4·9	3·7	4·4	4·7	4·5	3·9	3·6	3·5	4·5
13 d	3·5	3·0	3·0	2·5	2·1	1·3	0·1	-1·0	-1·5	1·1	4·4	8·3	12·5	13·7	13·7	15·7	15·9	10·6	3·0	5·1	4·6	-8·5	-8·0	8·4	*4·7*
14	-0·9	6·0	1·6	2·1	3·8	7·3	7·2	8·9	8·7	7·0	6·7	7·3	10·0	8·8	8·4	3·8	4·0	4·6	2·0	-0·9	-0·5	-10·8	-17·7	-9·7	2·8
15 d	5·0	-1·2	-2·3	-6·4	-4·4	-0·3	0·9	1·8	1·3	2·7	5·8	7·7	10·0	9·7	7·9	7·3	7·9	7·4	1·5	-9·0	1·6	-9·4	-1·2	0·7	1·9
16	0·0	4·5	-5·8	-6·3	-3·7	3·5	1·9	-1·7	-1·9	-0·1	1·9	4·3	6·4	7·7	7·7	6·9	5·2	4·5	5·0	-1·6	5·2	4·6	3·6	-4·3	2·0
17	-4·0	-2·3	-1·6	-4·8	-4·0	-2·9	-1·5	-1·6	-3·7	0·5	3·5	6·6	10·2	11·4	8·8	8·2	6·7	0·1	2·1	5·4	4·5	3·8	3·5	3·5	2·2
18 d	3·8	3·9	2·5	1·3	3·4	4·2	0·4	-6·4	-0·9	12·9	-21·2	-57·2	-18·3	-12·3	3·0	44·1	71·8	49·6	57·5	59·0	-23·7	-11·8	20·8	-136·6	2·1
19 d	-65·3	-95·0	-128·9	-109·0	-96·6	-50·8	-21·6	18·9	13·9	-2·7	0·9	2·2	5·3	2·9	5·8	8·1	7·1	9·5	12·7	-2·9	13·4	0·0	-1·9	-2·8	*-19·9*
20 d	2·8	2·0	-8·1	-9·5	-8·3	-5·1	-2·9	-1·0	1·2	0·6	0·1	0·0	9·5	7·8	10·3	7·6	3·5	1·0	-0·4	2·0	2·0	0·3	1·1	1·0	0·7
21	0·9	0·6	-0·9	-0·3	-7·4	-3·0	4·0	3·1	3·8	4·6	4·0	7·1	5·2	10·4	10·6	4·4	3·5	3·4	3·2	3·5	3·0	2·3	1·7	1·2	2·9
22 q	1·0	0·6	0·7	0·2	0·3	-0·7	0·3	-0·2	-0·1	1·0	3·0	4·6	7·1	8·3	8·0	6·6	4·2	3·4	3·5	3·6	2·9	2·0	2·1	2·4	2·7
23	1·6	1·4	0·6	0·3	0·5	0·3	-0·4	-1·9	0·4	1·7	2·9	6·7	10·9	14·4	16·9	17·1	12·4	11·3	6·1	5·4	0·7	1·0	1·4	1·2	4·7
24	8·0	3·0	-4·2	-5·2	-0·7	0·4	-1·6	-0·9	-0·3	1·9	4·0	8·1	13·1	15·7	13·2	13·0	10·9	7·8	-1·9	-9·1	-10·0	-13·2	-22·7	-16·3	0·5
25	-26·3	-9·2	-5·4	-3·6	1·2	-1·6	-2·5	-1·6	0·3	5·6	8·0	10·0	11·2	7·4	8·7	10·1	5·9	5·0	4·5	-1·9	-15·6	-0·7	-0·7	2·0	0·5
26	0·9	1·0	1·0	1·0	1·2	0·8	-0·5	-1·7	-2·1	-0·8	2·2	5·1	7·8	7·6	7·3	5·2	3·4	3·1	3·6	3·6	3·8	3·2	-0·1	1·6	2·4
27	3·7	-0·1	1·2	-2·9	-1·4	-0·5	1·0	5·7	6·7	7·7	10·8	11·9	12·7	12·6	9·0	7·8	0·1	1·5	2·4	2·0	2·4	2·9	2·0	0·9	4·2
28	0·6	1·2	-0·3	-0·8	-0·3	-1·3	-1·6	-1·5	-0·7	0·5	2·2	5·1	7·1	7·9	7·8	7·5	6·2	7·2	8·0	5·8	3·2	-2·2	-7·4	2·2	2·3
29	2·8	2·2	0·8	-0·9	1·8	-1·6	1·5	-0·5	-0·5	1·3	3·5	7·5	9·8	9·9	9·0	10·3	9·0	5·9	4·6	4·9	2·5	2·3	-3·4	-2·7	3·3
30	-0·9	2·6	-0·6	-3·1	-0·9	0·0	-0·8	-1·1	-1·2	0·1	4·9	7·3	8·1	7·2	6·9	7·4	5·5	3·9	2·8	-0·3	-11·1	-3·7	1·0	0·6	1·4
Mean	-0·8	-1·8	-4·2	-4·7	-3·8	-2·1	-1·1	0·2·	0·7	2·3	3·5	5·0	8·9	9·7	*9·8*	9·6	8·5	6·6	5·7	4·2	1·1	-0·4	0·0	-3·8	2·2

q denotes an international quiet day and d an international disturbed day.

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

38 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	893	881	881	881	893	887	899	894	896	897	898	904	905	901	912	923	939	952	944	928	904	897	890	858	902
2	825	840	874	894	897	897	899	898	895	894	893	892	896	909	922	923	920	912	912	903	879	876	877	859	891
3	824	860	886	896	899	899	899	900	899	901	894	891	891	893	897	901	901	898	895	895	897	899	897	896	892
4 q	898	896	899	902	902	901	899	897	896	891	891	892	893	895	898	902	903	898	895	895	896	893	895	895	897
5 q	897	901	902	902	902	901	897	897	895	891	891	887	884	886	893	897	900	896	895	893	893	893	895	895	895
6 q	897	898	900	899	898	897	897	897	896	897	898	895	886	888	894	897	900	901	900	896	896	889	890	893	896
7	895	896	897	896	893	892	890	885	883	882	886	886	884	896	943	942	927	937	937	916	869	849	879	891	898
8	890	862	837	863	886	890	892	888	885	886	891	892	895	896	898	902	904	902	901	900	901	889	868	871	887
9	867	867	875	875	887	895	897	894	891	896	896	895	891	891	894	897	899	899	903	907	903	899	896	816	889
10	794	837	870	886	888	895	897	899	896	893	893	892	891	887	891	894	900	901	902	906	900	897	896	893	887
11	892	874	871	876	887	892	897	896	895	891	887	883	887	900	913	917	912	918	923	923	917	901	871	869	895
12 q	856	872	885	886	892	898	902	900	898	896	896	893	891	887	887	894	897	897	896	897	897	897	896	896	892
13 d	895	895	895	896	897	898	898	897	891	884	878	874	882	909	971	1008	975	965	983	933	915	876	875	785	907
14	789	801	803	796	815	838	861	879	896	898	905	907	913	915	918	924	918	913	924	932	901	839	781	774	868
15 d	735	764	820	864	871	874	881	887	894	898	903	909	912	922	926	908	903	903	952	943	874	806	862	886	879
16	869	686	785	851	865	874	873	888	896	898	899	897	896	895	896	897	900	902	918	951	925	911	860	842	878
17	851	871	876	890	892	895	893	890	891	890	889	894	894	904	913	923	931	959	945	923	909	902	900	898	901
18 d	898	897	895	893	890	842	864	891	932	951	1017	1129	972	570	875	454	466	712	942	1275	1371	1243	1236	1002	926
19 d	1182	996	850	755	264	361	680	674	745	832	866	902	923	937	939	936	944	945	967	973	1007	840	928	910	*848*
20 d	852	842	845	889	895	915	927	932	939	957	977	1000	1001	1010	981	966	964	964	957	942	937	932	930	927	937
21	933	934	917	832	824	888	905	914	923	936	951	957	973	962	962	1006	1005	967	939	929	925	923	924	924	931
22 q	926	925	921	919	922	924	925	925	921	918	919	918	919	922	922	923	924	924	924	924	923	920	917	916	922
23	918	922	924	925	926	926	925	924	925	920	919	916	913	931	952	1009	1025	1051	989	948	932	923	915	910	*940*
24	837	843	874	894	898	889	887	898	900	905	909	908	909	920	922	919	931	940	992	978	907	801	663	671	883
25	641	745	838	877	896	909	915	913	917	923	919	921	926	949	980	984	996	1000	997	936	922	917	912	911	910
26	915	917	918	917	918	921	924	924	924	922	918	914	909	910	913	915	917	917	918	918	919	920	916	914	917
27	909	891	897	881	898	904	909	908	907	915	917	917	915	918	924	934	971	966	959	946	934	924	917	898	919
28	883	886	891	903	908	912	916	917	917	919	917	912	907	902	907	917	924	930	944	949	933	902	907	909	913
29	913	915	912	908	879	885	895	904	908	912	913	909	911	910	912	916	920	945	942	930	926	872	853	878	907
30	893	839	811	875	897	904	907	908	910	909	910	917	911	911	912	919	929	923	922	928	916	902	907	908	903
Mean	876	*868*	875	881	869	877	892	894	899	903	908	913	909	901	919	912	915	925	934	*937*	928	901	895	880	900

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

39 LERWICK — SEPTEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A
1	17 53	497	339	9 9	158	14 6	15·8	-12·5	17 52	28·3	17 50	984	842	24 0	142	2,2,2,3,3,4,4,3	23	1	87·6
2	19 56	443	340	11 13	103	13 21	12·8	-6·0	6 39	18·8	14 59	924	818	0 31	106	3,1,3,2,2,3,3,3	20	1	87·0
3	20 8	408	351	10 28	57	0 26	12·6	-2·9	6 0	15·5	16 8	902	817	0 13	85	3,1,2,2,1,1,1,2	13	0	86·9
4 q	18 34	411	353	10 21	58	13 10	11·0	-3·4	7 20	14·4	16 20	904	890	10 37	14	2,1,2,1,1,1,1,2	11	0	86·6
5 q	19 24	404	353	10 14	*51*	12 20	9·7	-1·4	7 21	11·1	5 8	902	883	13 12	19	1,1,1,2,1,1,1,0	8	0	86·6
6 q	20 8	419	348	11 12	71	13 14	11·5	0·1	7 18	11·4	16 44	903	884	12 55	19	1,0,0,1,2,1,2,1	8	0	86·8
7	14 10	457	353	10 14	104	14 17	23·3	-18·4	21 1	41·7	14 48	965	824	21 22	141	0,2,2,2,4,3,5,4	22	1	86·8
8	20 49	433	350	10 55	83	13 21	10·8	-8·8	20 47	19·6	21 25	913	832	2 42	81	3,3,2,1,2,2,3,4	20	1	86·0
9	23 23	425	357	11 3	68	23 29	21·6	-3·7	1 56	25·3	19 40	909	755	23 47	154	3,2,2,1,2,2,1,5	18	1	85·2
10	18 25	418	357	10 0	61	13 50	11·0	-4·1	1 11	15·1	19 1	909	773	0 0	136	4,1,2,1,1,1,2,1	13	0	85·2
11	21 49	421	349	10 41	72	13 19	17·9	-4·1	5 43	22·0	19 41	925	857	23 47	68	2,2,1,2,2,2,1,3	15	0	85·1
12 q	20 30	403	350	10 31	53	13 4	12·0	-1·1	7 39	13·1	6 53	902	848	0 16	54	2,2,1,1,1,1,0,0	8	0	85·0
13 d	14 36	527	240	22 50	287	15 12	25·6	-17·6	21 35	43·2	15 30	1032	751	23 51	281	0,0,1,2,5,4,4,5	21	1	84·8
14	17 28	421	271	2 46	150	7 16	12·9	-26·1	22 24	39·0	19 18	940	761	0 0	179	4,4,3,2,3,3,3,4	26	1	84·8
15 d	18 52	487	257	21 7	230	0 22	12·0	-23·4	21 30	35·4	18 52	1037	704	0 39	333	4,3,2,2,3,3,5,5	27	1	84·2
16	18 53	429	147	1 42	282	1 26	27·8	-32·1	1 55	59·9	19 20	967	619	1 38	348	6,3,2,2,2,2,3,4	24	1	84·0
17	17 23	420	343	10 27	77	13 5	12·5	-8·0	8 37	20·5	17 53	966	839	0 0	127	3,2,2,1,3,3,3,1	18	0	84·0
18 d	13 38	*1219*	-1488	23 51	*2707*	15 37	201·9	*<-301·8*	23 55	*>503·7*	22 24	1635	-159	15 36	**1794**	2,5,7,7,8,9,8,9	55	2	84·4
19 d	18 39	494	*-1607*	4 15	2101	4 39	*223·0*	-247·9	3 50	470·9	0 42	*1823*	*-350*	5 5	*2173*	9,9,9,5,3,4,8,5	52	2	85·2
20 d	12 3	502	118	1 24	384	0 59	19·4	-14·2	2 54	33·6	13 11	1045	808	1 5	237	5,4,3,6,5,3,2,1	29	1	86·0
21	15 15	496	87	3 47	409	3 35	20·1	-25·6	4 0	45·7	15 48	1031	731	3 53	300	3,6,3,3,3,5,2,1	26	1	86·2
22 q	18 38	390	331	11 18	59	13 45	9·0	-1·6	4 54	*10·6*	6 45	929	916	23 50	*13*	0,1,1,1;1,2,1,1	8	0	86·1
23	17 32	514	323	10 25	191	15 34	20·9	-3·7	20 45	24·6	17 28	1096	902	23 58	194	1,1,2,2,4,4,4,2	20	1	86·0
24	18 40	457	-311	23 29	768	13 27	20·0	-36·3	23 13	56·3	18 41	1053	550	23 14	503	4,3,3,2,3,3,5,8	31	2	85·8
25	14 44	428	-15	0 4	443	12 31	13·0	-42·9	0 9	55·9	18 6	1007	569	0 7	438	7,3,3,2,4,2,5,2	28	1	85·7
26	21 56	397	329	10 55	68	14 14	8·6	-3·7	8 33	12·3	8 20	924	908	12 40	16	1,1,1,1,1,1,1,2	9	0	85·2
27	16 56	412	325	12 3	87	12 39	13·9	-5·6	3 55	19·5	16 43	982	878	3 24	104	3,2,3,2,2,3,2,2	19	0	85·1
28	18 30	408	349	11 49	59	18 36	9·9	-11·2	21 57	21·1	18 50	956	877	0 42	79	2,2,1,1,1,2,3,3	15	0	85·0
29	22 30	437	320	10 13	117	13 46	13·5	-12·0	22 24	25·5	17 33	953	833	21 36	120	2,3,2,3,3,3,2,4	22	1	85·2
30	20 29	421	280	2 3	141	12 5	9·9	-15·9	20 18	25·8	20 15	942	793	2 17	149	4,3,1,3,2,2,4,3	22	1	85·0
Mean	- -	467	150	- -	317	- -	28·1	-29·9	- -	58·0	- -	1012	732	- -	280	-	-	0·70	85·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

40 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	388	384	385	385	385	380	379	380	373	361	356	354	354	360	366	375	382	390	388	386	384	382	384	382	377
2	385	385	386	385	385	382	380	377	371	362	358	357	360	368	373	382	383	386	397	400	385	380	393	375	379
3	378	377	380	380	382	384	380	375	366	358	355	356	356	357	363	370	378	388	395	397	393	386	383	382	376
4 q	381	389	388	388	388	389	385	381	373	362	357	358	365	370	378	380	389	394	399	402	404	399	393	394	384
5	379	381	380	388	391	393	388	380	360	353	362	359	364	374	384	384	390	387	395	396	394	393	391	392	382
6 q	393	386	387	388	392	391	392	387	377	367	367	367	374	373	374	385	390	388	394	399	396	390	392	388	385
7 q	386	387	387	388	386	385	384	379	374	367	363	364	371	378	388	391	393	397	395	396	394	395	397	394	385
8	392	392	389	384	383	381	393	383	370	360	356	356	359	366	378	386	394	375	376	386	388	399	389	386	380
9	385	384	385	384	381	387	385	379	370	354	350	349	360	362	374	389	392	393	394	393	396	398	393	391	380
10	391	390	390	389	391	391	391	388	380	376	368	365	375	381	387	398	408	399	402	403	399	405	386	383	389
11 d	386	390	394	385	389	397	367	381	372	340	325	343	367	362	360	365	387	475	399	383	375	343	153	115	*356*
12 d	262	361	262	260	365	381	367	330	333	362	362	362	369	376	378	374	383	391	380	383	382	382	370	370	356
13	388	377	382	380	382	382	375	380	376	366	355	357	365	368	374	382	385	382	386	390	385	386	388	392	378
14	385	385	384	381	382	383	390	389	377	366	356	356	366	374	390	398	380	382	385	382	379	382	374	388	380
15	379	365	374	374	371	379	371	362	344	340	331	338	363	368	367	378	381	385	384	369	349	330	369	379	365
16 d	378	376	369	362	383	387	387	378	376	371	360	355	367	361	377	389	406	391	379	381	385	354	375	381	376
17 q	383	382	382	384	385	391	391	376	365	358	354	357	355	365	375	375	385	385	388	388	387	390	392	385	378
18	381	381	383	384	390	390	390	386	373	365	359	362	367	367	371	378	390	392	377	376	382	381	382	381	378
19	381	375	364	390	392	398	383	371	374	366	358	360	368	376	373	387	384	381	383	385	383	379	384	383	378
20	381	380	381	384	395	392	384	367	364	357	353	356	358	367	375	375	379	387	395	393	387	379	383	384	377
21 q	384	375	381	392	390	389	397	392	377	362	353	357	361	371	380	387	390	392	394	395	396	395	395	395	383
22 d	391	384	385	398	400	402	395	396	385	373	363	364	369	387	392	414	475	622	488	429	380	356	122	346	*393*
23	376	374	369	367	359	364	372	371	361	348	339	342	356	365	372	379	379	389	389	371	373	364	347	294	363
24	321	373	381	382	380	387	386	386	383	361	358	358	360	366	380	367	386	389	404	439	370	376	377	378	377
25	381	378	377	372	390	398	389	381	373	365	359	353	359	371	375	384	387	390	390	383	385	385	387	387	379
26	384	381	382	386	386	387	389	388	389	373	353	364	364	366	371	381	386	397	383	387	388	345	362	347	377
27	381	379	381	386	385	385	386	386	383	372	361	359	362	367	372	378	384	387	389	391	390	379	378	387	379
28	380	383	382	387	390	390	388	387	384	379	376	370	373	380	380	380	389	388	393	379	384	386	379	368	382
29	347	378	388	387	390	392	391	391	390	384	379	381	385	388	390	394	394	394	396	394	386	393	397	388	387
30	391	391	387	383	389	399	396	395	388	376	374	365	370	374	372	379	389	388	387	383	382	383	384	384	384
31 d	387	381	388	396	416	382	346	366	369	370	367	369	379	392	396	415	450	582	675	654	455	135	95	63	385
Mean	377	381	378	380	386	388	384	380	373	364	358	*358*	365	371	377	384	393	*405*	403	400	388	372	359	360	378

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -7γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

41 LERWICK (D) — 12° + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	1·1	0·5	1·0	0·7	−0·3	−1·4	−0·3	−0·7	−1·2	−0·6	1·3	5·3	8·6	8·3	7·2	5·3	4·0	3·4	2·9	2·4	2·3	1·9	2·6	2·9	2·4
2	3·3	1·8	1·4	1·1	0·7	0·6	0·6	0·6	0·5	1·4	3·1	4·5	5·6	6·6	6·4	6·1	5·7	5·4	5·3	4·9	−1·5	1·3	−5·1	−5·9	2·3
3	−7·1	−2·0	0·9	1·0	0·4	0·2	0·6	1·0	1·4	2·1	4·7	6·6	7·9	8·2	8·0	6·7	5·5	4·6	4·4	4·1	3·2	2·0	0·4	1·2	2·7
4 q	3·3	1·9	1·2	1·1	1·1	0·4	0·2	−0·3	−0·4	1·3	2·5	4·3	6·4	7·6	8·3	7·0	6·6	6·1	5·5	5·0	4·4	3·0	1·6	−2·6	3·1
5	−8·4	−6·1	−3·3	−0·9	0·6	0·9	0·2	−1·5	0·1	1·6	4·1	7·6	9·1	9·2	8·9	6·6	5·7	3·9	4·2	3·9	3·3	3·0	2·5	−0·2	2·3
6 q	−1·6	−0·8	0·7	1·1	1·3	1·2	0·3	0·6	2·0	4·7	4·6	7·1	9·4	9·9	8·4	6·6	5·0	4·3	3·8	4·8	4·9	2·6	1·7	2·6	3·5
7 q	2·6	1·7	0·4	0·2	0·5	0·1	−0·3	−0·4	−0·9	0·0	2·7	5·3	6·4	6·9	6·8	5·7	4·6	4·5	5·5	4·9	4·3	3·6	3·0	2·2	2·9
8	0·4	0·2	−8·5	−3·2	−5·0	−2·1	−1·2	−0·9	−2·8	−2·1	0·2	3·5	5·4	6·7	7·6	6·4	5·6	4·2	4·5	3·2	1·7	−3·5	−0·4	2·0	0·9
9	2·1	2·1	1·5	1·9	3·7	−0·6	−0·9	−1·2	−0·5	1·0	3·8	6·9	9·2	10·1	8·0	6·3	4·9	4·8	6·1	5·3	2·3	−0·6	2·5	2·1	3·4
10	2·1	1·9	1·4	1·6	1·3	1·1	0·9	0·4	0·1	1·4	3·7	6·6	9·1	9·3	7·7	7·9	9·6	9·9	6·7	−0·3	−6·8	−5·1	−2·2	−0·8	2·8
11 d	5·0	−0·5	−6·6	−4·5	−2·2	−1·3	5·0	8·7	5·1	−0·5	2·0	5·8	10·4	11·6	10·9	6·5	5·9	0·6	−3·5	−5·8	−7·7	−6·6	−1·2	−29·0	*0·3*
12 d	−17·2	−6·8	−6·4	8·1	−4·2	0·7	1·5	9·2	10·0	2·9	2·8	4·4	4·7	5·6	5·7	4·4	−4·6	−6·0	−0·7	1·4	1·3	−1·4	−0·4	−0·6	0·6
13	2·8	0·2	−0·9	−0·2	0·9	1·1	1·1	2·5	0·6	1·6	2·1	3·9	5·5	6·1	7·0	5·5	4·6	1·9	−3·0	2·2	1·1	2·0	1·4	3·5	2·2
14	3·2	3·5	0·5	−0·5	0·6	2·9	2·7	2·5	1·2	2·4	4·5	7·8	11·6	12·0	7·6	11·7	4·5	5·0	3·9	2·5	2·2	2·0	1·2	2·7	4·1
15	−3·7	0·2	1·4	−0·2	3·5	4·3	9·4	4·7	6·1	3·5	5·3	8·5	9·2	11·3	8·9	6·9	2·8	−0·9	1·9	−5·8	−7·0	−5·7	−4·5	0·1	2·5
16 d	1·7	2·0	1·1	4·1	−2·6	−0·1	1·5	1·3	0·4	−0·9	1·8	5·1	9·0	8·5	6·9	4·9	−2·2	4·8	4·7	4·0	−0·7	−10·8	0·2	0·7	1·9
17 q	2·8	2·2	1·7	1·1	0·9	1·0	1·1	2·7	5·4	3·6	3·8	7·4	6·1	6·9	6·0	2·5	2·6	2 7	2·3	2·4	1·6	1·1	0·3	1·6	2·9
18	2·5	2·6	1·8	1·7	1·3	1·1	2·1	2·9	2·0	5·1	7·3	9·5	9·7	8·7	7·6	5·4	4·5	6·2	7·6	3·6	1·9	1·3	0·9	0·0	4·1
19	−0·3	0·7	7·1	−1·8	−3·4	−0·4	1·8	6·1	4·5	6·5	8·9	9·8	9·6	10·0	9·1	7·3	1·0	4·8	2·9	2·6	0·9	0·9	0·4	1·4	3·8
20	1·4	1·1	0·3	−0·4	−1·2	−0·9	0·3	3·1	5·9	5·9	7·8	8·8	10·0	9·8	9·7	8·2	6·3	3·7	2·7	3·1	0·3	−3·8	−2·3	1·3	3·4
21 q	3·0	5·8	2·0	−1·5	0·2	0·8	−0·3	−0·9	−1·6	0·2	2·9	5·6	6·6	6·6	5·9	4·3	3·3	3·0	2·9	2·3	1·7	1·9	2·0	0·8	2·4
22 d	−0·8	0·1	2·6	2·0	1·0	−0·7	1·1	1·6	−0·3	1·3	4·2	8·8	11·1	15·0	17·4	16·6	25·8	20·9	−3·6	−1·8	−2·7	1·2	−10·9	−4·7	*4·4*
23	0·8	1·1	0·0	0·1	2·6	2·8	0·4	−1·0	−1·7	0·1	3·6	5·3	8·2	9·6	9·1	7·5	6·9	4·5	−14·6	−8·7	−5·0	−5·3	−7·8	−2·9	0·7
24	0·6	−0·7	0·7	−0·8	1·8	1·1	1·3	−0·2	0·2	0·1	2·6	5·6	8·5	8·1	9·1	7·6	5·8	8·1	7·1	−3·8	−11·6	−2·4	−1·2	4·1	2·2
25	2·2	−0·9	−0·3	5·6	3·1	1·0	−0·3	−0·8	−1·1	−0·3	1·4	3·5	5·5	7·3	5·9	4·6	4·2	3·9	3·9	4·2	2·8	1·6	1·5	0·3	2·5
26	0·1	0·1	0·1	−1·7	−1·4	−0·4	0·1	−0·1	1·0	2·0	5·3	8·2	8·8	6·6	6·8	6·1	4·8	5·6	5·0	5·9	3·6	−3·2	−9·3	−5·8	2·0
27	−5·8	−2·9	−1·9	−1·6	0·2	0·6	0·2	−0·4	0·2	0·1	1·7	4·6	7·0	7·2	6·8	5·0	3·9	3·2	2·5	2·5	2·4	−2·4	−3·8	−0·7	1·2
28	−0·1	0·5	2·0	2·1	2·0	1·3	1·2	1·4	0·9	1·1	3·5	4·6	5·9	7·6	7·8	7·0	4·4	4·9	−3·4	−1·6	1·7	−1·6	−4·2	−6·2	1·8
29	−1·1	2·1	−0·5	0·4	1·0	0·8	0·7	0·7	1·1	1·5	3·1	5·9	6·6	6·5	5·6	4·3	4·9	4·9	3·9	3·8	−2·8	−0·4	−1·5	0·8	2·2
30	4·0	2·9	0·9	1·5	2·5	0·8	1·0	0·7	1·1	1·9	4·2	6·9	9·0	9·1	6·9	3·3	3·7	4·4	2·8	0·3	−0·2	0·0	−3·6	0·1	2·7
31 d	0·0	−1·0	−1·5	−2·6	0·7	−5·0	−1·7	−3·4	−4·7	−2·1	0·5	3·8	6·0	11·7	11·7	14·9	22·4	21·5	6·3	24·7	−6·6	−28·1	−27·1	−7·0	1·4
Mean	0·0	0·4	0·0	0·5	0·4	0·4	1·0	1·3	1·1	1·5	3·5	6·2	7·9	*8·7*	8·1	6·7	5·6	5·1	2·6	2·5	−0·2	−1·7	*−2·0*	−1·2	2·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

42 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	906	911	902	891	896	901	905	906	908	911	907	906	908	908	908	911	908	907	912	914	913	914	912	911	907
2	908	911	911	910	909	907	908	908	909	912	911	911	907	905	909	911	913	910	906	912	942	928	873	861	908
3	856	882	897	905	906	906	906	906	905	904	901	900	906	913	916	916	913	912	908	911	912	914	913	909	905
4 q	904	900	908	909	908	907	906	906	905	905	906	904	902	906	906	906	906	904	902	902	903	907	910	890	905
5	889	894	900	905	907	907	907	908	911	908	906	907	904	906	912	912	913	914	908	906	905	905	906	901	906
6 q	900	905	907	907	907	907	906	904	903	902	901	900	902	909	911	912	917	917	911	906	907	911	909	908	907
7 q	908	909	909	911	911	909	908	905	902	901	898	893	891	894	899	904	906	906	906	905	905	903	902	905	904
8	906	890	847	839	840	872	885	894	900	902	902	902	902	901	904	910	922	947	944	924	915	897	892	898	897
9	901	905	905	902	894	895	901	906	908	909	904	901	900	908	913	909	908	907	907	907	907	901	900	900	904
10	901	901	902	903	902	903	903	904	903	900	896	896	893	891	892	894	900	905	913	926	927	918	912	902	904
11 d	885	843	842	869	884	887	890	872	881	895	909	929	936	954	954	948	939	1035	998	840	829	847	697	561	880
12 d	665	732	765	736	804	871	890	893	890	894	901	909	910	912	917	923	936	934	925	922	921	910	880	843	*870*
13	852	877	893	898	900	901	908	908	912	913	916	916	912	914	912	913	913	917	917	909	913	912	911	896	906
14	886	886	886	891	896	897	892	897	903	907	908	909	909	917	943	960	981	938	920	924	920	917	905	880	911
15	836	836	872	887	894	880	883	902	924	921	934	925	924	933	937	951	973	975	972	936	918	882	893	906	912
16 d	911	913	906	843	831	868	882	895	904	913	915	911	910	921	927	934	958	955	954	932	924	883	879	907	907
17 q	912	913	913	912	908	906	905	911	909	913	912	914	916	916	921	929	922	916	914	913	913	908	905	906	913
18	906	909	911	909	906	905	902	902	907	909	911	916	916	923	924	924	926	926	944	945	934	926	921	915	917
19	909	906	889	879	890	891	897	896	896	898	900	907	915	925	938	954	987	954	937	925	921	918	913	907	915
20	907	911	911	908	901	900	901	905	901	906	906	909	914	921	923	926	922	917	912	913	916	921	908	902	911
21 q	899	895	893	901	906	907	907	910	915	915	913	910	909	911	913	913	912	909	907	906	904	903	902	901	907
22 d	900	904	902	896	900	900	901	901	906	906	904	904	908	912	915	926	1000	954	1027	988	877	854	796	788	907
23	878	913	918	918	920	914	918	921	922	922	920	916	913	919	929	937	936	942	954	957	944	911	873	832	*918*
24	789	867	903	907	909	911	913	913	912	917	916	914	916	920	927	945	948	950	994	980	909	908	901	872	914
25	852	890	904	903	882	896	907	913	915	913	912	912	910	907	911	912	912	915	920	927	927	921	916	911	908
26	906	906	900	904	907	909	910	913	911	912	915	910	910	907	909	909	911	912	944	959	944	896	912	859	911
27	872	896	906	906	907	908	912	914	916	917	917	915	913	912	915	915	911	910	911	912	914	928	927	916	911
28	914	911	911	907	907	907	908	908	911	908	908	909	907	909	916	916	915	919	927	932	931	922	908	888	912
29	868	841	886	900	903	904	904	903	905	907	907	905	904	905	906	906	906	906	908	915	929	916	906	906	902
30	899	899	897	900	898	896	900	902	906	909	908	912	912	914	922	924	916	916	916	922	921	917	911	895	909
31 d	872	890	882	879	813	779	778	829	882	900	903	906	906	909	913	919	954	1043	1030	992	1013	763	815	876	894
Mean	881	889	893	891	892	895	898	902	906	908	909	909	909	913	917	922	929	931	*934*	925	918	902	891	*879*	906

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −7γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

43 LERWICK — OCTOBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +	Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m. ′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A
1	17 51	400	348	12 51	52	12 11	9·4	−2·7	5 29	12·1	19 12	917	888	3 8	29	2,1,1,1,1,2,2,2	12	0	84·6
2	22 13	410	355	12 31	55	13 56	7·1	−10·7	23 2	17·8	20 49	954	849	24 0	105	1,0,0,1,1,1,3,4	11	1	84·3
3	18 55	400	353	10 46	47	13 0	8·9	−8·9	0 21	17·8	14 20	917	843	0 11	74	3,0,1,1,1,1,1,1	9	0	84·5
4 q	23 12	407	353	11 21	54	14 19	9·2	−5·8	24 0	15·0	21 49	912	882	23 47	30	1,0,1,1,1,1,1,3	9	0	84·6
5	5 53	399	351	9 40	48	12 15	10·1	−10·1	0 40	20·2	16 51	916	883	0 0	33	2,2,2,2,1,1,0,2	12	0	84·9
6 q	19 14	402	363	9 36	*39*	12 44	11·4	−2·5	0 0	13·9	16 59	922	897	0 25	25	2,1,1,2,2,2,1,2	13	0	85·0
7 q	17 10	405	361	10 31	44	12 57	7·6	−1·8	8 42	*9·4*	2 4	912	889	12 50	*23*	1,1,0,1,0,1,0,1	5	0	85·0
8	21 14	409	354	10 50	55	14 39	8·2	−10·2	2 25	18·4	17 54	960	825	4 9	135	3,3,2,0,1,3,3,2	17	1	85·0
9	21 15	406	347	10 40	59	4 12	11·1	−4·6	21 9	15·7	14 5	915	890	4 46	25	0,2,1,1,2,1,2,2	11	0	84·7
10	16 59	418	360	11 17	58	17 15	11·6	−11·6	20 35	23·2	19 31	935	890	14 3	45	0,0,1,1,1,2,4,3	12	1	83·7
11 d	19 4	657	−123	22 54	780	19 34	29·7	−62·7	23 7	92·4	17 40	1073	*411*	23 19	*662*	3,2,3,3,3,5,7,7	33	2	83·0
12 d	17 36	405	83	3 3	322	3 30	16·0	−38·1	0 5	54·1	16 45	948	628	0 52	320	6,6,3,2,2,3,2,4	28	1	82·6
13	0 12	401	344	10 52	57	14 21	7·7	−9·6	18 17	17·3	17 48	922	844	0 2	78	3,2,2,2,2,2,3,2	18	0	82·0
14	15 38	414	344	11 20	70	15 33	17·6	−0·8	3 11	18·4	16 5	997	847	24 0	150	2,2,1,1,3,3,1,3	16	1	82·0
15	18 14	394	315	21 42	79	13 26	12·2	−12·6	19 38	24·8	18 5	988	832	0 40	156	3,2,2,2,2,3,4,3	21	1	82·2
16 d	20 59	421	266	21 37	155	3 14	11·2	−21·0	20 57	32·2	18 29	964	815	3 44	149	2,3,2,1,2,3,4,5	22	1	82·3
17 q	22 39	395	350	12 10	45	11 30	8·7	−1·0	21 0	9·7	15 27	932	903	22 9	29	1,1,2,1,1,1,1,1	9	0	82·3
18	17 20	397	354	10 53	43	11 41	10·3	−1·8	23 10	12·1	18 50	951	901	7 6	50	0,1,1,1,1,2,2,1	9	0	82·1
19	5 55	400	351	2 16	49	14 15	11·1	−8·0	16 10	19·1	16 5	1005	873	3 4	132	3,2,2,2,2,3,2,1	17	1	81·7
20	4 37	399	351	10 48	48	12 27	10·7	−5·9	21 34	16·6	15 30	928	898	4 40	30	1,1,2,2,1,1,2,2	12	0	81·2
21 q	6 46	399	351	10 50	48	1 47	9·0	−3·0	3 43	12·0	9 6	916	890	2 20	26	2,2,1,0,0,0,0,1	6	0	81·4
22 d	17 50	*803*	*−258*	22 28	*1061*	17 47	56·8	−37·6	22 50	94·4	16 55	1087	681	22 21	406	2,2,1,1,3,7,7,8	31	2	80·7
23	18 31	404	244	23 47	160	14 26	11·7	−24·9	18 26	36·6	18 19	974	786	23 50	188	3,2,1,1,2,3,4,5	21	1	80·9
24	19 39	572	302	0 5	270	17 56	13·0	−33·4	19 45	46·4	19 38	1065	772	0 6	293	4,1,2,1,2,3,5,4	22	1	79·4
25	5 29	404	351	11 35	53	13 28	8·0	−2·4	2 14	10·4	19 57	931	830	0 0	101	3,3,1,1,1,1,1,0	11	0	79·7
26	20 46	412	302	23 21	110	20 51	11·6	−14·4	21 53	26·0	19 16	968	831	23 35	137	0,1,2,2,2,1,3,4	15	1	80·0
27	0 22	395	354	11 39	41	12 22	8·8	−9·7	0 0	18·5	21 56	933	852	0 0	81	3,2,2,2,2,0,0,2	13	0	79·4
28	18 36	410	355	23 13	55	14 31	8·8	−8·7	23 22	17·5	20 13	939	875	24 0	64	1,1,2,1,2,2,3,3	15	0	79·6
29	22 32	411	330	0 40	81	13 46	7·8	−7·9	20 40	15·7	20 40	933	826	1 23	107	3,1,1,1,1,1,3,2	13	0	78·9
30	5 57	405	362	11 45	43	12 35	9·8	−6·0	22 41	15·8	15 6	932	881	23 46	51	2,2,1,1,2,2,1,2	13	0	78·3
31 d	18 2	784	−158	23 42	942	23 51	*97·8*	*−90·1*	23 20	*187·9*	23 41	*1099*	504	24 0	595	2,4,4,2,3,6,7,8	36	2	78·0
Mean	− −	443	281	− −	162	− −	15·3	−15·1	− −	30·4	− −	960	820	− −	140	−	−	0·55	82·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

44 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	−249	−166	−60	163	176	127	180	274	325	343	378	415	441	499	609	588	645	514	367	362	358	354	356	357	*307*
2	358	360	363	367	369	373	374	374	373	370	367	365	365	367	370	372	372	374	378	378	367	358	356	361	368
3	368	374	374	376	379	376	378	379	378	373	368	366	373	383	390	385	375	380	382	383	384	387	380	382	378
4 q	382	376	379	383	383	378	379	378	375	374	370	366	364	369	375	385	391	393	392	395	394	383	388	386	381
5	381	380	378	379	384	382	387	390	388	381	379	381	384	386	392	379	395	407	372	383	398	372	362	374	383
6 d	357	363	374	355	368	373	343	324	313	315	342	370	391	414	389	401	395	419	397	378	350	195	276	329	355
7	308	342	376	378	376	379	379	370	370	358	345	355	353	365	376	381	371	399	390	383	371	379	363	355	368
8	360	359	354	340	375	397	381	364	367	357	362	362	373	377	371	383	387	387	364	370	379	383	381	385	372
9	379	381	384	386	386	386	388	386	385	376	360	347	352	375	384	368	373	383	383	384	378	381	385	386	378
10 d	383	387	389	380	388	395	389	386	384	359	367	368	379	372	370	371	382	391	418	384	376	376	373	363	380
11	329	324	349	347	358	381	384	383	380	350	334	366	359	363	373	376	386	375	379	375	376	366	366	376	365
12	374	378	379	382	385	383	379	384	378	376	367	366	367	375	379	383	386	380	376	376	376	387	379	381	378
13	378	379	382	379	388	391	392	394	383	364	364	361	371	379	380	381	384	381	380	378	383	388	390	381	381
14	378	379	385	388	390	390	388	389	383	376	364	364	366	375	381	389	388	388	390	387	387	382	378	385	382
15 q	381	383	385	388	390	393	392	392	388	379	373	373	378	384	385	387	390	396	397	396	398	394	397	397	388
16 q	393	390	392	396	392	395	402	398	389	381	381	384	387	390	391	394	395	395	396	399	402	394	388	389	*392*
17 d	389	396	401	400	395	392	402	387	368	362	373	376	378	387	406	400	512	453	406	362	362	349	356	363	391
18	366	355	367	369	376	386	390	373	353	339	339	346	371	381	382	381	385	410	464	437	376	365	363	383	377
19	304	203	358	384	392	391	396	385	380	371	365	372	373	381	389	392	390	391	391	389	385	396	386	375	372
20	367	381	383	383	385	389	384	378	381	381	381	382	384	390	390	392	395	396	398	392	390	388	389	390	386
21	378	378	367	370	386	388	392	389	387	383	379	380	380	385	387	381	389	390	393	393	405	389	375	374	384
22	380	381	381	386	388	392	392	394	390	385	384	383	381	383	382	372	387	393	388	389	397	379	368	387	385
23	381	358	344	323	383	390	385	390	376	378	383	375	371	366	374	378	392	392	392	392	387	380	381	374	377
24 q	369	384	383	386	389	392	389	390	392	387	382	379	377	381	388	388	390	391	391	391	392	392	381	386	386
25	388	388	386	388	394	395	398	394	382	390	387	384	381	387	384	392	396	394	391	386	387	384	389	389	389
26 q	385	385	386	390	391	394	392	391	391	390	389	387	379	384	387	383	384	388	390	391	395	395	393	391	389
27	390	392	390	393	404	396	394	407	401	400	396	398	397	386	390	398	397	403	402	401	401	398	399	386	397
28 d	376	384	354	357	333	316	255	260	281	308	333	383	375	373	370	371	381	418	592	392	404	363	377	371	364
29	357	357	357	354	358	364	368	366	352	364	361	361	365	375	378	386	390	389	390	386	382	380	380	380	371
30	375	380	378	378	378	378	378	376	376	373	377	381	383	384	390	390	384	388	393	394	390	383	387	382	382
Mean	*349*	350	361	368	375	375	374	375	372	368	368	373	377	384	390	391	*400*	399	398	387	384	374	375	377	377

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −10γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

45 LERWICK (D) — 12° + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	−32·9	−37·7	−27·5	−18·3	26·9	3·2	16·3	12·6	1·1	0·9	1·1	1·2	5·1	7·1	−3·0	10·0	19·2	8·5	5·0	1·6	0·1	0·5	0·4	0·4	0·1
2	0·1	0·1	0·2	0·7	0·8	0·7	0·5	0·1	−0·7	−0·6	0·0	1·7	2·5	2·4	2·0	0·9	1·1	1·9	1·5	1·4	−3·9	−5·7	−6·4	−7·5	−0·3
3	−3·3	0·2	1·2	1·2	0·9	−0·6	0·1	0·5	0·0	0·5	1·5	4·0	8·1	7·5	7·3	6·8	4·5	2·5	1·5	0·5	0·7	0·3	−3·0	−1·6	1·7
4 q	1·1	−1·8	−3·2	−3·6	−2·7	−1·9	−0·9	−0·6	0·2	0·8	2·1	3·5	4·5	4·1	3·2	3·2	2·2	2·6	2·5	2·1	3·5	4·3	3·0	2·4	1·3
5	−0·8	−1·0	−0·2	1·2	0·4	0·3	0·2	0·3	0·3	1·0	2·6	3·8	5·1	5·1	5·6	4·5	6·1	−6·3	3·4	3·4	−8·7	−13·9	−8·7	−0·2	0·1
6 d	3·4	5·2	2·1	2·2	3·5	10·6	9·5	10·1	6·3	11·2	7·7	8·0	8·8	11·2	3·4	12·6	−8·6	−6·4	−8·5	−12·6	−4·8	−2·7	−6·2	−7·0	2·5
7	6·2	4·2	0·4	2·1	1·5	1·9	3·1	0·4	1·4	2·7	3·0	5·6	7·3	6·3	5·7	4·3	−6·2	−15·1	−9·6	−6 6	−4·8	−2·9	−4·8	−3·0	0·1
8	0·1	−0·9	−1·4	2·4	3·0	3·0	4·1	1·6	1·2	1·9	1·6	3·4	5·4	5·0	−2·8	2·5	3·7	2·1	−18·3	−3·4	0·1	0·1	−0·2	−1·2	0·5
9	1·4	−0·5	0·6	1·4	1·8	1·7	1·8	1·1	0·6	2·3	4·1	4·4	7·9	7·9	3·5	3·4	7·8	4·0	2·8	2·0	−2·4	−0·7	0·7	0·7	2·4
10 d	2·1	−1·2	−1·2	−5·6	−2·2	−0·9	1·2	1·9	1·5	1·4	2·8	3·7	5·8	9·1	10·9	8·6	7·3	0·5	1·2	−2·4	−2·0	−2·7	−2·4	−5·6	1·3
11	−19·7	−21·4	−4·5	−6·3	−1·4	0·5	1·2	0·8	1·3	3·2	4·1	5·6	7·9	6·3	5·1	2·9	2·5	−5·0	−7·2	1·5	−4·9	−1·4	−5·0	−5·9	*−1·7*
12	−1·9	0·4	1·3	1·8	2·1	2·7	3·9	3·2	0·2	1·2	1·7	3·9	4·2	3·7	3·6	3·3	2·2	3·2	0·5	−0·8	0·9	−8·8	−5·1	−2·9	1·0
13	−0·6	0·9	1·6	1·3	2·1	1·9	1·8	1·8	1·1	2·2	4·4	5·4	6·4	7·2	7·0	5·3	6·0	1·2	2·2	1·0	0·5	0·6	0·3	−3·9	2·4
14	−1·7	−1·4	1·1	1·5	1·2	1·6	1·7	1·8	0·5	2·1	2·4	4·6	5·2	5·5	5·0	3·9	3·6	3·3	0·1	2·3	1·3	−0·8	−2·5	−2·1	1·7
15 q	0·2	1·0	1·3	1·5	1·5	1·2	1·1	0·8	0·7	1·3	3·2	5·0	5·0	5·7	4·1	3·4	3·9	3·2	2·7	1·5	1·5	1·0	1·2	1·6	2·2
16 q	1·0	1·7	1·4	−1·1	−0·7	1·2	1·2	0·5	0·8	1·4	3·3	4·7	5·1	4·7	3·9	3·4	3·9	3·6	3·3	3·0	3·2	−1·4	−5·0	−2·5	1·7
17 d	−0·4	−1·0	−6·0	0·1	0·4	2·1	8·5	5·3	2·2	4·1	4·7	7·9	8·1	12·8	10·8	−2·5	11·2	3·2	−12·3	−5·0	−16·2	−19·6	−3·9	−1·5	0·5
18	2·3	1·1	1·2	0·9	1·5	0·2	0·0	2·2	0·8	−1·1	2·8	5·7	5·6	7·5	8·2	5·8	−2·8	6·7	5·1	−2·8	−4·5	1·2	1·1	−2·9	1·9
19	−9·8	5·8	−0·8	−2·8	−0·5	0·7	1·2	1·0	1·0	1·5	3·3	6·1	5·8	4·1	4·3	3·7	3·3	3·2	3·1	2·5	0·5	−0·2	−6·5	−4·0	1·1
20	1·4	2·1	2·1	1·8	1·2	1·1	1·2	1·3	1·3	2·0	4·1	5·8	5·5	5·4	4·4	4·1	4·0	4·3	5·2	3·4	−2·6	1·6	−0·7	−2·3	2·4
21	−5·5	−6·0	−3·8	1·9	−0·3	−0·8	−0·1	0·1	0·5	2·1	2·5	4·2	4·1	5·1	6·6	3·7	3·9	3·2	3·8	0·3	1·4	−4·0	−6·0	−4·6	0·5
22	3·2	−0·8	−1·3	0·2	1·2	1·5	1·2	1·3	1·4	2·0	2·7	2·8	4·2	5·6	6·0	1·5	0·1	7·7	7·1	3·6	−8·5	−8·5	−9·2	−4·1	0·9
23	−7·1	−9·2	−9·8	−8·3	0·4	1·3	1·2	1·4	1·2	−0·3	1·4	4·5	5·0	4·1	5·2	2·3	4·1	4·1	2·6	2·3	1·2	−2·8	−9·8	−5 9	−0·5
24 q	−3·1	0·4	1·1	1·1	1·5	1·6	1·2	1·4	1·8	1·5	1·6	3·0	3·1	3·3	3·7	3·6	3·2	3·3	3·3	3·5	1·4	−4·6	−0·5	0·3	1·5
25	0·3	−0·3	0·8	1·2	1·4	1·2	1·8	2·1	1·0	1·7	2·1	3·3	3·5	3·5	2·3	2·3	3·7	3·2	2·6	−1·3	−7·5	−1·3	−1·4	0·4	1·1
26 q	0·3	1·2	0·9	0·4	1·4	1·2	1·6	1·9	2·3	2·5	3·1	3·6	4·2	3·1	3·6	3·7	3·2	3·0	2·2	1·4	1·6	1·4	1·2	1·2	2·1
27	1·3	1·2	1·2	1·5	0·9	1·1	6·7	4·3	3·1	4·0	5·1	7·3	9·2	7·7	5·1	3·8	2·8	4·1	3·4	2·3	2·0	0·3	−0·8	−1·3	*3·2*
28 d	−0·4	0·8	−13·1	−18·4	−25·4	−7·5	7·0	10·0	−0·3	1·9	2·4	−0·7	1·9	1·8	2·6	1·2	3·5	10·2	−8·2	−0·1	4·0	−3·2	−0·8	1·1	−1·2
29	−1·3	−1·8	−2·0	−2·6	−2·6	−1·4	−1·0	1·5	4·8	4·6	5·7	4·9	6·1	5·4	5·2	3·9	3·9	2·2	2·8	1·9	0·2	0·3	−0·5	−0·2	1·7
30	−2·0	−1·7	−0·4	−0·2	0·0	0·4	0·5	0·2	0·1	1·0	2·8	4·0	3·9	3·1	2·4	4·7	5·1	4·3	5·6	3·6	−2·6	0·7	−1·2	−0·8	1·4
Mean	−2·2	−2·0	−1·9	−1·4	0·7	1·0	2·6	2·4	1·3	2·0	3·0	4·4	5·5	*5·7*	4·5	4·0	3·6	2·2	0·3	0·3	−1·6	−2·4	*−2·8*	−2·1	1·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

46 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	718	734	812	559	497	699	776	818	885	906	936	965	990	1008	997	1045	1046	1057	975	936	921	926	921	923	*877*
2	924	923	923	922	921	919	915	915	916	918	919	922	922	920	928	926	925	921	918	918	925	890	895	886	**917**
3	896	904	916	918	916	915	913	912	913	914	916	915	918	923	926	927	925	922	920	916	914	916	922	922	917
4 q	919	920	911	908	910	910	910	910	911	912	915	916	915	917	919	919	918	916	914	913	913	923	929	923	915
5	920	921	921	921	917	915	911	908	908	909	907	906	908	913	918	939	938	951	971	942	943	896	893	896	920
6 d	878	880	898	895	878	874	883	899	904	905	931	987	1000	1003	970	965	1005	1029	955	918	888	782	787	798	913
7	788	806	869	897	905	911	911	922	927	930	931	930	922	925	921	921	941	930	925	921	928	923	908	877	907
8	875	889	867	854	840	873	890	895	901	914	921	918	916	931	958	936	928	927	958	938	923	917	914	905	908
9	898	895	904	907	910	911	911	915	914	912	918	926	927	952	964	987	949	928	925	924	928	925	916	914	923
10 d	905	873	873	873	882	889	898	906	908	919	918	918	914	941	985	964	941	1011	1025	1003	959	933	920	856	926
11	794	787	770	770	826	886	905	912	914	925	935	926	927	920	922	925	923	942	954	943	933	922	904	915	895
12	918	913	915	915	912	913	915	915	921	921	921	921	921	921	923	921	921	925	937	942	912	866	875	892	915
13	900	901	903	906	906	909	911	912	918	921	918	923	926	926	931	928	930	934	938	944	935	924	914	905	919
14	905	907	906	906	907	907	907	909	913	915	915	916	916	918	918	918	919	920	921	920	920	916	910	892	913
15 q	900	909	911	910	909	908	908	909	911	915	914	915	914	916	916	918	916	912	911	913	912	914	911	901	911
16 q	904	907	904	903	904	901	899	903	907	908	908	911	912	913	913	912	911	910	908	907	907	926	928	925	910
17 d	923	925	926	913	907	893	875	877	894	914	930	928	942	973	1024	1070	1118	1111	1063	984	941	920	903	892	*952*
18	868	876	882	900	902	906	902	908	921	934	928	949	960	953	959	989	999	1013	1023	1035	985	906	864	862	934
19	846	770	809	882	893	905	904	910	910	912	914	915	919	919	920	920	919	918	915	919	934	951	948	931	903
20	912	909	923	925	921	917	914	913	911	912	912	913	915	917	918	920	917	916	915	929	933	918	917	909	917
21	905	918	927	916	913	919	915	914	912	910	910	908	908	913	919	923	920	919	919	922	908	913	910	898	914
22	896	911	914	915	914	912	911	910	911	907	903	903	906	910	916	938	941	931	941	937	937	885	899	906	915
23	893	873	855	819	859	874	896	904	912	914	910	914	919	920	922	929	921	916	915	916	922	931	935	919	904
24 q	916	910	912	912	912	911	912	909	905	906	908	907	906	906	908	911	910	911	913	914	920	927	926	918	912
25	911	909	909	908	906	906	905	906	911	909	909	909	902	902	906	906	904	907	912	918	918	911	907	905	908
26 q	904	901	901	901	901	901	904	904	904	906	907	907	910	910	911	912	911	910	910	911	910	910	909	910	907
27	908	906	905	903	897	897	891	882	890	893	895	900	904	910	912	906	906	902	903	904	908	912	911	913	902
28 d	923	944	963	885	788	718	765	800	863	898	916	903	915	921	921	918	919	945	998	985	990	912	944	942	903
29	940	938	932	920	911	921	918	916	919	916	920	921	923	923	921	919	918	916	915	916	922	923	927	923	922
30	923	919	920	916	914	912	912	912	911	910	910	909	911	914	917	918	919	917	919	928	942	940	933	933	919
Mean	890	889	896	886	*883*	891	896	901	908	913	917	920	923	928	933	938	939	*942*	941	934	928	912	909	903	913

Corrections to be applied to all values H, −6γ; D, −4·2′; V, −10γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

47 LERWICK — NOVEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	h. m.	γ	γ	′	′	′	h. m.	γ	γ	h. m.	γ			°A
1 d	14 32	*816*	*-426*	1 23	*1242*	4 49	*50·8*	*-127·6*	0 19	*178·4*	17 19	1090	*415*	4 12	*675*	7,6,6,4,6,6,4,1	40	2	78·0
2	17 47	383	348	21 47	35	12 54	3·0	-9·8	21 52	12·8	20 47	934	883	23 50	51	1,0,0,0,0,1,3,2	7	0	78·0
3	15 0	401	355	0 10	46	12 45	9·9	-6·7	0 0	16·6	15 22	929	884	0 0	45	2,1,1,0,2,2,0,2	10	0	78·0
4 q	20 0	398	362	12 11	36	21 36	5·9	-5·7	3 1	11·6	22 14	936	907	2 50	29	2,2,1,1,1,0,1,2	10	0	78·3
5	16 49	426	339	21 48	87	16 35	8·8	-24·2	20 58	33·0	18 20	993	880	23 54	113	1,1,1,1,1,4,4,4	17	1	78·5
6 d	17 56	695	52	21 46	643	13 0	19·2	-48·1	18 6	67·3	17 56	1145	696	21 40	449	3,3,3,4,4,6,6,6	35	2	78·5
7	18 51	417	265	0 31	152	0 34	12·6	-20·1	17 15	32·7	16 48	953	752	0 55	201	4,2,2,2,2,4,3,3	22	1	78·3
8	5 14	409	294	3 44	115	12 40	6·5	-24·1	18 29	30·6	14 20	964	826	4 26	138	3,4,3,2,3,3,4,2	24	1	77·5
9	14 44	398	339	11 23	59	15 7	13·0	-6·3	20 54	19·3	15 26	1009	885	0 53	124	2,1,1,2,3,4,2,2	17	1	76·7
10 d	18 33	426	343	23 46	83	14 19	15·1	-20·5	23 57	35·6	17 39	1050	764	24 0	286	3,2,1,2,3,4,4,5	24	1	76·7
11	18 11	399	282	0 40	117	11 44	10·1	-31·3	0 50	41·4	18 0	965	750	2 33	215	4,4,2,3,2,4,4,3	26	1	77·1
12	21 20	405	354	20 37	51	20 32	6·8	-17·1	21 13	23·9	19 36	947	849	21 26	98	2,1,2,1,1,1,3,4	15	1	77·4
13	23 0	399	355	11 35	44	13 43	8·8	-4·8	23 55	13·6	19 26	948	898	1 12	50	1,1,1,1,1,2,1,2	10	0	77·6
14	23 11	401	361	10 29	40	13 28	6·4	-7·1	23 10	13·5	17 55	925	888	23 54	37	1,1,1,1,1,2,2,2	11	0	77·7
15 q	22 57	408	370	10 45	38	13 17	6·2	-1·3	0 10	7·5	15 23	918	890	0 2	28	1,0,0,0,1,1,1,2	6	0	77·8
16 q	20 30	406	377	9 54	29	12 20	5·9	-7·2	22 10	13·1	22 5	933	898	0 3	35	1,2,1,1,1,0,1,3	10	0	77·7
17 d	16 59	638	336	20 30	302	16 55	18·9	-35·4	20 57	54·3	16 50	*1195*	864	6 52	331	3,2,3,3,4,6,5,5	31	1	77·3
18	18 57	596	326	10 15	270	19 0	18·6	-11·9	20 53	30·5	18 14	1061	849	23 4	212	2,2,3,2,3,4,5,3	24	1	77·6
19	21 21	418	106	1 8	312	1 29	16·1	-12·1	0 14	28·2	21 33	973	744	1 50	229	6,3,2,2,2,2,2,4	23	1	77·9
20	23 15	405	361	0 35	44	12 31	6·7	-6·2	20 20	12·9	20 0	944	899	24 0	45	2,1,2,2,1,0,3,2	13	0	78·0
21	20 22	413	351	2 49	62	14 6	8·1	-12·3	21 40	20·4	1 10	932	891	0 24	41	3,3,2,1,2,1,2,3	17	1	78·1
22	21 3	444	339	21 43	105	18 7	9·8	-25·3	21 0	35·1	15 47	952	872	21 40	80	3,1,1,2,1,3,5,4	20	1	78·7
23	5 3	405	281	3 24	124	12 44	6·9	-15·3	22 16	22·2	22 0	950	791	3 23	159	4,4,2,2,2,2,1,3	20	1	79·1
24 q	21 12	402	361	0 32	41	11 45	4·1	-11·5	21 11	15·6	21 33	931	903	8 56	28	2,1,1,1,0,0,3,3	11	0	79·5
25	16 30	401	375	20 25	26	16 41	4·4	-13·8	19 54	18·2	19 53	925	904	7 32	21	1,1,1,0,0,1,3,2	9	0	80·0
26 q	21 13	398	375	12 29	*23*	12 58	5·3	-1·4	3 24	*6·7*	13 5	913	900	5 30	*13*	0,1,1,1,1,0,0,0	4	0	79·9
27	7 18	414	378	24 0	36	12 43	11·9	-3·8	22 46	15·7	24 0	918	880	7 19	38	0,2,2,1,2,1,1,2	11	0	79·6
28 d	18 33	*816*	186	7 11	630	6 52	27·1	-46·2	18 42	73·3	18 27	1068	770	5 59	298	4,6,5,4,2,5,7,5	38	2	80·1
29	16 2	395	343	8 23	52	8 54	7·9	-2·5	1 44	10·4	1 10	943	907	4 14	36	2,2,3,2,1,1,1,1	13	0	79·5
30	23 1	404	372	0 36	32	18 18	8·0	-6·2	20 49	14·2	20 27	944	907	11 30	37	1,1,0,2,1,1,3,2	11	0	80·0
Mean	- -	458	295	- -	163	- -	11·4	-18·9	- -	30·3	- -	976	838	- -	138	-	-	0·63	78·3

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

48 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	379	373	389	376	379	379	373	384	354	394	400	399	413	491	907	905	715	535	449	272	264	-32	199	58	*406*
2 d	210	280	298	218	277	264	333	346	357	358	364	363	367	382	377	389	390	390	384	380	379	377	376	374	*343*
3	373	373	374	367	373	376	377	377	375	372	370	368	369	372	376	386	396	397	384	388	396	403	380	364	379
4	366	368	371	384	391	394	392	384	380	376	363	362	365	365	386	381	388	379	385	391	397	375	375	374	379
5	373	374	373	374	371	377	383	378	374	383	382	380	379	380	378	390	391	393	415	412	388	386	398	380	384
6	377	380	380	381	379	381	385	385	377	376	375	381	383	384	388	382	370	377	382	384	384	389	380	382	381
7	378	378	378	380	386	395	397	397	390	372	368	367	374	381	380	380	380	381	380	377	381	386	388	380	381
8	376	380	382	384	383	390	393	394	389	384	379	376	376	383	382	384	386	385	382	388	384	371	390	379	383
9	385	385	388	391	391	396	398	396	393	385	382	376	362	361	383	380	387	390	390	390	382	375	380	404	385
10	385	382	381	387	385	390	398	390	388	382	379	378	380	381	390	379	380	385	390	390	387	385	383	386	385
11 q	387	388	388	389	394	396	395	392	388	380	378	381	385	385	387	389	390	394	394	394	391	391	391	391	389
12 q	391	391	393	396	399	405	399	396	391	391	388	388	388	389	392	383	385	384	388	388	390	389	389	390	391
13	400	390	392	396	398	400	400	401	406	406	404	397	395	387	387	397	400	432	489	372	368	380	380	376	398
14 d	394	368	347	337	387	394	389	377	374	358	343	375	374	385	362	372	376	377	384	384	370	353	368	377	372
15	373	370	375	381	394	386	384	381	380	380	381	383	386	386	381	384	389	389	388	388	386	394	390	383	384
16 d	381	369	356	382	344	386	397	394	391	385	386	386	388	390	394	392	391	390	389	390	389	391	389	394	385
17	392	388	387	388	386	398	403	397	384	385	381	388	389	393	397	397	396	399	381	386	389	393	403	376	391
18	383	385	384	376	385	389	396	403	380	377	384	385	390	391	400	402	397	399	398	398	394	393	384	386	390
19	392	387	387	386	388	390	393	398	390	381	371	370	382	386	388	387	392	390	386	388	383	387	386	386	386
20 q	384	382	391	390	391	393	394	395	394	390	385	382	384	389	390	382	394	392	390	392	390	391	390	391	389
21 q	389	389	389	389	391	394	391	391	392	391	390	390	390	395	396	397	397	398	396	394	397	394	405	403	394
22	392	390	393	392	394	398	400	400	397	394	393	394	395	394	394	395	386	383	381	386	390	392	390	391	392
23	397	388	389	389	405	403	401	400	399	399	399	402	402	397	397	394	382	380	389	393	388	390	371	406	394
24	383	384	386	391	394	397	399	394	394	380	376	380	374	388	388	381	382	378	386	388	386	397	389	385	387
25 q	385	387	389	393	395	394	397	406	400	394	393	395	396	394	393	392	393	394	396	399	397	392	391	387	394
26	388	390	391	390	389	391	400	394	392	394	393	394	394	400	390	396	398	391	394	396	393	392	409	362	393
27 d	383	399	376	380	393	408	401	393	389	387	385	388	378	384	393	390	388	393	386	388	392	389	385	410	390
28	373	377	379	388	393	393	394	390	392	393	391	391	393	393	393	388	392	394	395	399	394	390	389	390	390
29	398	379	382	381	387	390	391	392	387	390	396	394	390	388	391	397	388	383	389	395	394	388	385	382	389
30	382	383	387	385	388	392	391	393	391	389	385	383	383	386	396	396	397	387	382	390	390	384	368	372	387
31	387	384	382	387	390	390	393	391	391	386	384	383	381	384	388	391	382	384	394	393	398	393	391	388	388
Mean	379	379	379	378	384	388	391	391	386	384	382	383	384	389	405	*405*	399	394	394	386	384	*373*	380	374	386

387 at 0-1h. January 1, 1942.

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -6γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

49 LERWICK (D) — 12° + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	-0·6	0·0	-4·7	-2·7	-1·7	0·6	0·3	-3·3	4·1	2·8	-4·6	+4·5	8·2	9·5	-6·1	12·2	11·3	-2·3	1·7	-16·3	-8·5	-4·1	-13·0	3·5	-0·4
2 d	-7·7	-9·3	-6·3	-9·6	7·6	-1·7	-7·3	-3·5	-2·6	-0·3	-0·1	2·7	3·7	3·4	7·1	5·9	4·7	-4·4	-0·9	0·7	1·6	0·4	0·8	1·3	-0·6
3	0·9	0·9	1·3	1·3	-0·2	-0·5	-0·4	-0·3	0·0	1·0	1·4	2·1	2·3	2·8	2·9	3·2	4·0	7·8	6·9	2·6	-5·6	-12·8	-4·5	-5·4	0·5
4	-2·9	-5·0	-0·7	1·3	0·7	0·5	1·7	2·3	3·5	5·5	4·5	5·3	4·3	5·2	5·2	6·3	5·2	5·3	6·6	-0·6	0·7	-6·1	-1·0	-0·6	2·0
5	-0·4	0·0	-0·2	-0·3	1·3	1·1	-0·9	-0·9	0·6	1·6	3·1	3·2	3·8	4·9	3·8	3·5	7·3	10·4	8·8	2·9	-0·3	0·3	-7·5	-7·0	1·6
6	2·5	0·9	-0·1	-0·5	3·3	3·2	0·9	1·5	0·7	1·3	1·4	2·0	3·2	3·7	4·5	4·3	-2·1	0·0	1·5	-0·2	-1·0	1·3	-2·3	-0·6	1·2
7	-0·4	1·0	1·6	3·4	1·9	1·3	1·3	1·1	1·3	2·8	3·0	5·2	5·0	4·9	3·3	2·5	1·7	1·2	0·5	-1·8	-1·4	-2·9	-3·3	-6·3	1·1
8	-1·8	0·3	-0·7	0·8	1·6	0·7	1·1	1·3	1·1	1·8	3·5	4·0	4·1	5·2	3·8	2·3	3·0	4·9	2·4	1·3	0·3	-1·3	-1·9	-6·0	1·3
9	-0·5	-0·1	0·8	1·3	1·5	1·3	0·7	1·6	0·4	0·6	2·4	2·8	6·4	5·5	6·1	4·2	1·7	1·7	1·5	1·0	0·6	-2·0	-2·9	0·0	1·5
10	-1·0	-1·3	0·4	0·0	0·1	0·3	0·7	0·8	0·8	1·0	3·0	3·6	4·5	4·4	4·1	5·2	5·4	1·9	1·2	0·8	0·4	0·1	-2·3	-0·8	1·4
11 q	0·5	1·0	1·4	2·5	1·3	0·3	0·8	1·0	1·2	1·6	3·6	4·6	4·8	4·5	3·9	3·0	2·6	1·4	1·2	1·3	1·0	0·8	0·7	0·9	1·9
12 q	0·7	0·9	1·5	1·9	1·9	0·5	1·1	0·9	0·9	2·4	3·8	4·8	4·6	3·4	5·7	4·7	3·9	2·3	-0·3	1·2	0·2	0·0	-0·4	0·7	2·0
13	1·0	0·2	0·7	1·0	1·7	2·0	2·2	2·4	3·1	4·0	4·9	5·2	6·9	8·3	8·8	11·3	13·8	12·6	-0·8	-6·1	-3·1	-5·9	-3·5	-2·4	*2·8*
14 d	-6·8	-7·9	-0·2	9·4	-0·3	0·8	2·1	3·3	4·1	4·5	6·4	6·2	6·9	4·3	4·1	0·3	3·4	0·2	-2·0	-9·2	-4·8	-20·6	-8·6	-1·7	-0·3
15	-0·4	3·5	3·3	1·8	0·3	1·1	2·6	1·1	0·4	1·0	1·8	2·7	3·1	3·4	3·2	2·0	1·7	1·5	1·3	0·8	-0·2	-5·8	-4·7	-0·4	1·0
16 d	0·6	-0·6	0·2	-3·6	-6·7	-5·9	-3·5	0·1	0·9	1·3	3·2	3·4	4·3	5·3	4·2	5·5	4·2	3·1	2·1	1·3	0·1	-0·8	-0·6	0·5	0·8
17	0·5	0·4	-0·7	-2·1	0·4	-0·7	-0·3	1·4	4·5	2·9	2·2	1·3	3·1	4·6	5·5	5·8	7·6	3·2	4·3	1·2	-3·8	-6·6	-6·4	-2·4	1·1
18	0·2	0·3	1·0	1·5	0·4	1·6	3·7	0·6	3·9	1·2	0·4	4·3	2·7	4·5	5·0	7·4	5·7	5·1	2·7	2·0	0·4	-1·3	-1·3	-0·7	2·1
19	-0·9	-0·3	0·8	0·8	0·8	0·9	0·5	0·7	1·1	1·4	3·1	5·3	5·5	4·6	4·2	2·6	2·9	4·0	1·4	1·8	1·4	-2·0	-2·9	-0·7	1·5
20 q	-0·4	-0·1	0·7	1·4	1·4	0·6	1·0	1·0	0·7	1·0	1·5	2·4	3·4	4·5	4·5	3·7	3·7	2·5	1·5	1·0	0·1	-0·6	-0·4	-0·3	1·5
21 q	0·0	0·9	1·0	1·4	1·4	1·1	0·7	0·4	0·4	0·6	1·7	2·5	3·1	3·6	3·4	2·5	2·9	2·8	1·7	1·0	0·8	-0·7	-2·8	0·6	1·3
22	1·2	0·6	-0·5	0·4	1·4	1·7	1·4	1·2	0·9	1·3	1·6	2·5	3·9	3·9	3·7	3·5	3·0	1·9	2·3	1·4	0·1	-0·4	-0·1	0·6	1·6
23	-2·2	0·4	1·1	3·2	-0·4	-0·4	0·6	1·4	1·4	2·1	2·4	3·3	5·3	6·3	6·2	7·0	7·6	5·4	3·3	1·3	-0·9	-5·7	-4·1	-5·6	1·6
24	-3·3	-0·1	0·2	0·7	1·4	1·4	1·7	1·5	1·7	4·1	6·7	6·1	7·4	8·1	7·5	5·2	3·4	0·4	1·3	1·4	-4·7	-0·5	-2·6	-2·4	1·9
25 q	0·1	0·0	-0·1	0·1	0·8	1·1	1·6	1·0	0·2	1·4	2·4	3·8	5·5	3·5	2·8	2·3	3·0	2·8	1·7	1·7	1·4	1·1	0·8	0·3	1·6
26	-0·5	0·5	0·6	0·0	-0·4	1·4	-0·4	0·9	0·9	2·1	2·0	2·6	4·5	5·4	3·4	2·6	5·8	3·1	3·4	2·3	1·7	-0·3	-1·8	-5·3	1·4
27 d	-11·1	-12·4	-14·6	-8·5	-4·3	-1·9	0·5	0·9	1·2	1·3	1·7	5·2	4·2	4·5	4·5	4·0	5·0	4·0	5·5	3·4	0·8	-0·9	-1·6	-12·6	*-0·9*
28	-5·9	-3·2	0·5	-4·1	-5·8	-2·4	-0·3	0·2	0·2	0·9	1·5	2·9	3·3	3·6	5·2	4·6	2·7	3·6	3·1	1·4	0·1	0·5	-3·4	-1·6	0·3
29	-12·1	-4·7	-1·9	-0·5	-0·4	-0·6	0·1	-0·3	1·4	0·1	0·6	2·8	4·4	3·2	4·0	4·8	5·7	1·2	2·2	0·3	0·4	-12·6	-4·5	-3·1	-0·4
30	-0·7	0·0	1·8	0·4	0·9	0·7	0·4	0·0	-0·1	0·3	1·3	2·7	3·3	3·5	3·8	4·4	5·6	6·3	3·3	2·8	0·3	-1·9	-2·3	-0·3	1·5
31	-4·6	-2·1	0·5	2·3	1·2	0·5	0·3	0·1	0·0	0·4	1·0	2·0	2·9	2·9	3·3	3·3	3·6	5·5	2·1	1·4	-3·4	0·0	0·1	0·5	1·0
Mean	-1·8	-1·1	-0·4	0·2	0·4	0·3	0·5	0·7	1·3	1·7	2·3	3·6	4·5	*4·7*	4·2	4·5	4·5	3·2	2·3	0·1	-0·8	-2·9	-2·8	-1·8	1·1

q denotes an international quiet day and d an international disturbed day.

1·1 at 0-1h. January 1, 1942.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

50 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	932	936	927	911	907	908	898	886	880	859	901	951	920	986	783	862	892	1048	961	899	891	732	722	668	*886*
2 d	692	769	801	804	766	774	862	888	901	911	916	919	928	939	940	939	948	959	956	954	942	928	922	921	887
3	921	921	918	919	914	916	915	915	914	914	917	920	919	921	922	919	916	924	943	930	955	942	929	917	*923*
4	892	898	914	879	883	895	901	906	906	907	913	920	936	938	934	929	933	945	971	998	963	923	927	922	922
5	920	917	915	913	911	902	900	902	900	898	901	904	907	914	918	916	922	929	971	975	939	945	953	942	921
6	924	919	916	909	911	906	907	906	908	908	911	911	911	913	917	924	939	934	927	923	918	897	894	897	914
7	900	898	898	902	905	908	907	906	905	906	905	905	902	909	915	919	919	919	923	927	927	913	901	891	909
8	893	896	901	902	905	904	906	905	905	902	902	902	901	905	912	919	919	931	935	927	924	926	896	885	908
9	893	897	901	902	905	906	905	905	905	903	903	907	917	920	921	921	918	917	915	915	921	926	913	852	908
10	881	895	897	894	904	905	904	908	907	907	906	907	908	912	917	928	929	925	919	916	915	915	915	908	909
11 q	907	906	906	903	902	903	905	906	907	908	907	907	908	908	910	910	910	910	910	911	912	911	917	913	908
12 q	910	906	902	899	895	899	899	899	899	902	901	900	901	907	908	915	915	917	917	914	914	913	911	905	906
13	887	890	896	896	896	895	897	897	894	894	894	897	901	907	914	916	950	1036	1074	1002	948	925	909	894	921
14 d	840	839	855	795	843	878	894	901	905	914	925	921	923	934	959	958	945	944	946	938	879	875	885	898	900
15	906	901	887	891	888	897	898	905	908	911	912	913	913	918	921	917	912	909	909	909	913	904	897	905	906
16 d	907	897	838	809	808	827	871	888	893	898	900	902	903	906	909	910	909	908	907	907	909	908	908	898	888
17	884	891	899	900	905	897	891	888	891	894	899	906	908	907	910	913	924	943	961	951	945	927	886	869	908
18	899	906	904	909	907	899	894	886	893	896	910	914	914	913	912	911	913	914	920	918	916	918	923	915	909
19	898	905	910	911	909	907	902	898	901	902	907	907	909	912	917	920	915	916	923	923	928	924	920	916	912
20 q	912	914	906	910	910	908	907	905	902	899	901	903	902	903	909	918	916	915	916	914	913	909	907	905	909
21 q	906	905	908	908	908	908	908	907	903	900	899	898	899	901	904	908	908	909	912	912	910	909	901	886	905
22	883	892	897	902	903	904	903	903	902	900	899	897	896	898	900	903	911	918	919	916	914	913	909	898	903
23	885	895	897	897	887	892	894	896	897	897	896	894	894	897	903	909	935	955	931	924	924	930	926	869	905
24	873	891	895	895	895	896	898	901	902	904	902	899	903	902	908	915	917	923	918	915	921	905	900	902	903
25 q	900	901	901	898	898	899	899	899	899	899	899	898	898	898	899	900	900	902	904	904	907	911	911	911	901
26	910	906	902	901	900	895	894	899	902	901	900	900	900	901	903	903	903	911	913	913	916	923	899	875	903
27 d	883	893	861	886	897	896	896	900	902	900	903	903	907	903	903	905	909	908	921	925	921	921	925	906	903
28	899	909	907	886	888	892	893	900	900	900	900	900	901	902	904	908	907	905	907	906	913	925	926	927	904
29	905	910	908	905	906	904	903	903	903	902	903	903	905	909	910	911	917	925	918	916	915	925	905	905	909
30	908	906	906	907	905	903	903	902	901	900	902	905	907	906	908	909	909	924	938	924	926	933	932	903	911
31	909	909	908	908	909	908	907	907	906	904	904	908	909	908	911	912	923	925	916	917	913	905	907	908	910
Mean	*892*	897	896	892	893	895	899	901	901	901	904	907	908	913	910	914	919	931	*932*	927	921	912	906	894	907

909 at 0-1h. January 1, 1942.

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}2'$; V, -6γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

51 LERWICK — DECEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A
1 d	14 53	*1148*	*-289*	21 29	*1437*	16 34	*65·0*	*-83·5*	14 51	*148·5*	14 4	*1116*	*247*	14 52	*869*	3,2,4,5,8,7,7,7	43	2	78·5
2 d	17 58	407	56	0 1	351	4 42	17·0	-26·4	0 9	43·4	17 38	972	788	0 49	184	6,5,4,2,3,4,3,1	28	1	78·4
3	21 0	417	358	23 36	59	17 34	11·8	-20·1	21 0	31·9	20 47	987	908	24 0	79	0,1,0,1,0,3,4,4	13	1	79·0
4	20 34	440	331	21 2	109	20 53	15·8	-16·7	20 35	32·5	19 0	1016	870	0 50	146	3,2,2,2,2,2,4,4	21	1	79·4
5	19 10	461	359	20 5	102	19 59	14·0	-21·0	23 1	35·0	19 20	1038	897	8 59	141	0,1,1,1,1,3,4,4	15	1	79·0
6	21 40	396	366	16 31	30	15 32	5·9	-4·3	16 38	10·2	16 40	943	883	21 53	60	2,2,1,2,2,3,1,2	15	0	78·7
7	5 49	402	361	11 6	41	11 49	6·6	-8·4	23 4	15·0	20 3	935	889	23 12	46	1,2,2,1,1,1,2,2	12	0	78·8
8	22 30	429	362	21 49	67	17 28	7·9	-8·0	22 30	15·9	18 15	940	870	22 36	70	2,1,1,1,1,2,1,3	12	0	78·1
9	23 3	424	353	13 27	71	14 57	8·0	-4·5	21 52	12·5	21 32	926	841	23 32	85	1,0,0,2,2,2,1,4	12	0	77·8
10	6 30	400	373	15 41	27	15 36	6·9	-3·6	22 17	10·5	16 20	931	859	0 0	72	2,1,1,1,1,1,0,1	8	0	78·4
11 q	6 4	397	377	10 22	*20*	12 13	5·4	-0·2	0 18	*5·6*	19 57	912	899	3 50	*13*	0,1,0,1,1,0,0,0	3	0	79·2
12 q	4 51	408	381	15 29	27	15 10	6·5	-3·5	18 12	10·0	18 11	922	895	4 52	27	0,1,0,1,1,2,2,1	8	0	79·2
13	18 36	538	356	19 46	182	17 21	18·8	-13·3	19 7	32·1	18 30	1085	880	0 36	205	2,1,2,1,2,5,5,3	21	1	79·1
14 d	20 36	420	317	3 37	103	3 3	16·0	-33·6	21 7	49·6	15 7	988	776	3 25	212	4,4,2,3,3,3,5,5	29	1	78·9
15	21 32	425	366	1 44	59	1 44	7·3	-21·1	21 24	28·4	14 35	924	884	2 10	40	3,2,2,2,2,1,0,4	16	1	78·8
16 d	7 10	405	318	4 22	87	3 51	7·3	-13·4	4 18	20·7	15 0	912	760	4 2	152	4,4,3,2,1,1,1,2	18	1	78·6
17	22 44	441	350	23 6	91	17 52	15·4	-18·5	22 0	33·9	18 13	969	849	22 51	120	2,2,2,3,1,4,3,4	21	1	78·3
18	15 35	426	361	8 53	65	7 5	11·3	-5·7	7 45	17·0	22 6	928	877	7 31	51	2,2,3,3,2,3,1,2	18	1	78·1
19	0 9	402	362	11 9	40	12 30	6·5	-5·0	22 35	11·5	20 38	930	894	0 19	36	2,0,1,1,1,1,2,2	10	0	78·0
20 q	6 50	397	375	15 22	22	15 10	6·0	-1·2	1 10	7·2	15 40	921	898	9 56	23	1,0,0,1,1,1,0,1	5	0	77·8
21 q	22 48	418	387	0 57	31	23 42	5·5	-6·3	22 33	11·8	19 0	913	871	23 56	42	0,0,0,1,0,1,0,3	5	0	78·1
22	0 0	403	375	17 58	28	13 34	4·5	-2·2	21 23	6·7	18 0	923	872	0 0	51	2,1,0,1,1,2,1,2	10	0	78·5
23	23 34	436	362	23 2	74	16 11	9·1	-11·5	23 50	20·6	17 6	971	839	23 37	132	2,2,0,1,2,3,2,4	16	1	78·0
24	22 1	408	364	12 11	44	13 29	9·1	-12·4	20 23	21·5	17 42	925	844	0 0	81	3,0,0,1,2,2,3,2	13	0	77·9
25 q	7 40	412	384	0 14	28	12 55	6·5	-1·1	23 50	7·6	23 50	913	897	13 3	16	0,1,1,1,1,1,0,1	6	0	78·1
26	22 17	453	348	23 19	105	16 29	7·0	-8·4	23 23	15·4	21 40	926	868	23 16	58	1,2,1,1,2,2,0,4	13	1	76·8
27 d	23 29	444	357	1 19	87	18 3	8·6	-24·7	1 35	33·3	23 14	931	855	2 40	76	4,3,2,1,1,2,2,4	19	1	76·0
28	19 50	406	362	0 17	44	14 17	6·0	-9·3	0 30	15·3	22 2	933	882	0 1	51	3,2,1,1,1,1,2,3	14	0	74·8
29	0 13	428	367	0 50	61	16 18	8·3	-17·7	21 38	26·0	21 36	935	899	9 30	36	3,1,1,2,1,3,2,3	16	1	74·5
30	16 15	401	354	23 6	47	17 11	7·5	-6·5	22 3	14·0	18 18	946	898	23 34	48	1,0,0,1,1,2,2,3	10	0	74·3
31	21 5	413	374	17 0	39	17 19	6·4	-6·5	0 9	12·9	17 2	935	898	21 10	37	2,1,0,1,0,2,2,2	10	0	75·2
Mean	- -	445	330	- -	115	- -	10·9	-13·5	- -	24·4	- -	953	848	- -	105	-	-	0·52	77·9

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

52 LERWICK 1941

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−10·2	*−10·8*	−7·1	−5·6	−1·3	+4·1	+6·1	+5·8	+2·1	−1·9	−6·6	−6·6	−4·9	−2·1	+0·8	+4·3	*+13·2*	+11·1	+5·7	+3·8	+2·8	+3·2	−1·4	−4·5
Feb.	−6·5	−7·4	−8·7	−9·1	−0·8	+6·0	+6·3	+6·7	+1·3	−7·8	*−14·4*	−9·7	−6·4	−2·1	+2·4	+10·8	*+13·6*	+12·7	+11·0	+7·9	+6·9	−0·7	−6·0	−6·0
Mar.	−22·3	*−43·7*	−24·2	−19·2	−4·5	+3·8	+3·3	0·0	−6·0	−12·5	−11·8	−8·1	+3·2	+24·2	+25·5	+28·0	+24·7	+39·1	*+41·5*	+22·4	+10·6	−12·2	−33·3	−28·5
Apr.	−2·4	−17·8	−12·1	−6·3	−1·4	−0·4	−2·2	−6·7	−12·9	−21·8	*−25·2*	−24·6	−18·3	−4·7	+8·5	+18·0	+27·7	*+31·2*	+25·6	+23·3	+13·9	+8·0	+0·7	−0·1
May	−3·8	−14·1	−7·0	−7·4	−6·1	−4·5	−8·2	−13·0	−18·7	−24·0	*−25·1*	−24·4	−17·4	−7·2	+3·4	+11·1	+20·3	+32·8	*+37·0*	+33·2	+25·4	+10·4	+4·0	+3·3
June	−9·3	−7·5	−8·7	−4·2	+1·3	−1·5	−8·0	−14·8	−21·9	−28·2	*−31·1*	−27·7	−19·2	−11·7	+0·1	+9·5	+23·0	+32·2	+37·9	*+39·0*	+28·9	+17·6	+7·4	−3·1
July	−5·9	−9·3	−23·8	−14·3	−5·6	+1·2	−20·1	−39·1	*−41·1*	−32·3	−21·9	−17·9	−12·6	+13·0	+26·6	*+36·3*	+26·4	+29·4	+33·6	+32·2	+25·9	+9·2	+4·9	+5·2
Aug.	*−49·9*	−23·3	−7·5	+1·1	−3·8	−2·9	−5·8	−13·4	−24·4	−32·3	−32·9	−24·0	−13·3	+9·3	+31·8	+41·5	*+46·6*	+43·9	+40·5	+34·1	+17·2	+2·0	−7·1	−27·4
Sept.	−34·9	−21·2	−27·8	−27·0	−29·2	−12·5	−12·0	−6·3	−9·1	−10·5	−11·4	+0·5	+13·6	+37·3	+42·2	+42·3	*+48·7*	+41·2	+24·5	+11·3	−9·2	−3·3	−7·3	*−39·9*
Oct.	−1·5	+2·5	+0·1	+1·6	+7·9	+9·3	+5·4	+1·3	−5·8	−14·7	*−20·8*	−19·8	−13·2	−7·4	−1·4	+5·4	+14·1	*+27·1*	+24·1	+21·4	+9·3	−6·5	−19·9	−18·5
Nov.	*−28·0*	−26·5	−16·2	−8·6	−2·2	−1·5	−2·5	−2·1	−4·5	−8·8	−8·5	−3·7	−0·2	+7·0	+13·6	+14·0	*+22·8*	+21·7	+21·3	+10·0	+7·5	−2·9	−2·1	+0·4
Dec.	−7·8	−7·8	−7·1	−8·1	−2·6	+1·6	+5·1	+4·1	0·0	−2·1	−4·2	−3·3	−2·4	+2·8	+18·1	*+18·7*	+12·9	+7·8	+7·7	−0·2	−2·3	*−12·9*	−6·0	−12·0
Year	−15·2	−15·6	−12·5	−8·9	−4·0	+0·2	−2·7	−6·5	−11·7	−16·4	*−17·8*	−14·1	−7·6	+4·9	+14·3	+20·0	+24·5	*+27·5*	+25·9	+19·9	+11·4	+1·0	−5·5	−10·9
Winter	*−13·1*	*−13·1*	−9·8	−7·9	−1·7	+2·5	+3·7	+3·6	−0·3	−5·1	−8·4	−5·8	−3·5	+1·4	+8·7	+11·9	*+15·6*	+13·3	+11·4	+5·4	+3·7	−3·3	−3·9	−5·5
Equinox	−15·3	−20·1	−16·0	−12·7	−6·8	+0·1	−1·4	−2·9	−8·5	−14·9	−17·3	−13·0	−3·7	+12·3	+18·7	+23·4	+28·8	*+34·7*	+28·9	+19·6	+6·1	−3·5	−14·9	*−21·7*
Summer	−17·2	−13·5	−11·7	−6·2	−3·5	−1·9	−10·5	−20·1	−26·5	*−29·2*	−27·7	−23·5	−15·6	+0·9	+15·5	+24·6	+29·1	+34·6	*+37·3*	+34·6	+24·3	+9·8	+2·3	−5·5

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−2·38	−1·97	−2·16	−1·27	−0·74	−0·81	−0·12	+0·51	+0·76	+1·58	+1·89	+2·77	+3·93	*+4·38*	+3·22	+3·29	+1·47	−0·91	+0·26	−2·56	−2·02	−3·20	*−3·41*	−2·51
Feb.	−1·72	−1·17	−2·54	−1·31	−1·89	−1·40	+0·02	+0 29	+0·70	+1·50	+2·66	+3·63	+4·84	*+5·60*	+4·71	+2·89	+0·57	+0·36	−1·03	−1·97	−2·58	*−4·59*	−3·98	−3·59
Mar.	−1·61	−3·19	−2·99	−3·33	−2·03	−1·79	−0·97	−1·01	−0·67	+0·29	+2·41	+4·67	+6·40	*+6·49*	+5·91	+3·67	+1·19	+2·80	+0·61	−0·93	−3·12	−3·02	−4·48	*−5·30*
Apr.	−2·56	*−2·57*	−1·97	−2·20	−2·39	−1·47	−1·38	−2·64	−2·99	−1·86	+0·36	+3·18	+5·90	*+7·33*	+6·29	+4·75	+3·33	+2·82	−0·49	−0·45	−1·15	−2·35	*−4·15*	−3·34
May	−2·23	−2·12	−3·90	*−4·51*	−4·26	−4·18	−4·14	−4·11	−3·92	−2·26	+0·13	+3·12	+5·67	*+6·57*	+6·26	+5·44	+4·68	+3·78	+2·71	+1·44	+0·07	−0·69	−1·58	−1·97
June	−2·70	−3·73	−5·22	−5·07	−5·81	*−6·06*	−5·45	−4·86	−4·35	−2·90	−0·24	+2·96	+5·49	+6·95	*+7·15*	+6·94	+5·79	+4·50	+3·77	+3·01	+1·68	+0·31	−0·48	−1·68
July	−0·73	−1·90	−1·22	−4·05	−4·60	−5·23	−4·42	*−5·74*	−4·88	−2·56	−2·91	−1·06	+3·15	+4·57	*+5·40*	+5·32	+5·37	+4·57	+4·33	+3·37	+2·41	+1·29	+0·15	−0·63
Aug.	−2·54	−3·86	−3·71	−4·58	−4·61	*−5·30*	−4·85	−4·53	−3·30	−0·74	+1·52	+4·26	+7·18	*+8·05*	+7·09	+5·84	+4·25	+2·22	+1·68	+0·64	+0·23	−0·45	−2·01	−2·48
Sept.	−2·96	−3·98	−6·44	*−6·93*	−6·01	−4·28	−3·29	−2·05	−1·50	+0·07	+1·30	+2·80	+6·70	+7·51	*+7·57*	+7·40	+6·25	+4·34	+3·48	+1·97	−1·12	−2·61	−2·23	−5·99
Oct.	−2·48	−1·99	−2·40	−1·94	−2·06	−2·05	−1·46	−1·18	−1·31	−0·93	+1·12	+3·74	+5·51	*+6·22*	+5·62	+4·32	+3·13	+2·69	+0·17	+0·02	−2·58	−4·09	*−4·48*	−3·59
Nov.	−3·33	−3·13	−3·02	−2·49	−0·47	−0·13	+1·46	+1·23	+0·13	+0·91	+1·87	+3·23	+4·35	*+4·59*	+3·37	+2·90	+2·48	+1·10	−0·82	−0·79	−2·77	−3·55	*−3·89*	−3·23
Dec.	−2·94	−2·28	−1·50	−0·97	−0·72	−0·80	−0·65	−0·48	+0·11	+0·61	+1·16	+2·47	+3·34	*+3·55*	+3·11	+3·39	+3·38	+2·07	+1·18	−1·01	−1·96	*−4·08*	−3·99	−2·99
Year	−2·35	−2·66	−3·09	*−3·22*	−2·97	−2·79	−2·10	−2·05	−1·77	−0·52	+0·94	+2·98	+5·21	*+5·98*	+5·47	+4·68	+3·49	+2·53	+1·32	+0·23	−1·08	−2·25	−2·88	−3·11
Winter	−2·59	−2·14	−2·31	−1·51	−0·95	−0·79	+0·18	+0·39	+0·43	+1·15	+1·89	+3·03	+4·11	*+4·53*	+3·60	+3·12	+1·97	+0·65	−0·10	−1·58	−2·33	*−3·85*	−3·82	−3·08
Equinox	−2·40	−2·93	−3·45	−3·60	−3·12	−2·40	−1·77	−1·72	−1·62	−0·61	+1·30	+3·60	+6·13	*+6·89*	+6·35	+5·03	+3·47	+3·16	+0·94	+0·15	−1·99	−3·02	−3·83	*−4·55*
Summer	−2·05	−2·90	−3·51	−4·55	−4·82	*−5·19*	−4·71	−4·81	−4·11	−2·11	−0·37	+2·32	+5·37	*+6·53*	+6·47	+5·89	+5·02	+3·77	+3·12	+2·11	+1·10	+0·11	−0·98	−1·69

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−20·7	*−21·3*	−17·6	−15·2	−15·8	−13·1	−9·8	−8·7	−6·3	−5·2	−2·1	+1·0	+2·7	+8·2	+12·7	+17·2	+32·1	*+32·5*	+23·6	+17·8	+11·3	−2·0	−7·1	−14·2
Feb.	−29·4	*−32·9*	−31·1	−27·1	−23·3	−18·3	−13·2	−8·7	−5·8	−1·7	+2·1	+5·6	+9·0	+14·4	+22·0	+27·3	*+31·0*	+30·2	*+29·4*	+27·6	+19·2	+5·8	−8·5	−23·6
Mar.	*−44·3*	−37·5	−39·1	−27·1	−21·4	−18·5	−10·3	−1·8	+6·6	+14·1	+18·8	+21·1	+22·3	+22·8	+19·6	+29·7	*+36·1*	+31·5	+34·8	+28·1	+11·2	−14·9	−39·2	−42·6
Apr.	−24·4	−23·4	*−25·0*	−20·8	−13·9	−12·9	−11·1	−5·8	−1·1	+1·9	+2·7	+3·5	+4·4	+9·8	+18·9	+23·1	*+27·8*	+25·5	+25·8	+18·9	+13·1	+2·6	−15·3	−24·3
May	−21·5	*−31·4*	−24·6	−20·0	−14·4	−16·0	−9·6	−5·7	−3·7	−2·0	−0·8	+1·2	+3·9	+9·8	+15·9	+18·3	+20·2	+23·6	*+26·0*	+24·4	+21·2	+8·8	−9·0	−14·6
June	−20·9	*−23·1*	−21·3	−18·2	−10·9	−5·0	−1·5	−0·3	+0·8	+1·1	+0·1	−0·8	−0·7	+1·5	+6·3	+11·4	+14·6	*+19·0*	+18·8	+17·3	+15·8	+9·2	−0·8	−12·4
July	−19·7	−23·3	*−34·5*	−26·9	−14·5	−6·5	−5·5	−2·0	+3·1	+5·2	+9·5	+3·5	−7·6	−2·9	−0·5	+9·7	+22·2	*+24·1*	+23·3	+21·3	+16·8	+8·2	+1·7	−4·7
Aug.	−39·9	*−41·3*	−34·4	−19·6	−12·2	−12·8	−6·4	−1·7	+1·9	+2·5	+4·2	+5·8	+7·8	+13·7	+17·9	+28·1	+32·6	*+35·9*	+31·4	+26·4	+9·7	−2·8	−18·2	−28·6
Sept.	−24·8	*−32·0*	−25·4	−19·7	−31·1	−23·6	−8·7	−6·5	−1·7	+3·0	+7·6	+12·9	+8·9	+0·5	+18·5	+11·2	+14·4	+24·2	+33·5	*+36·8*	+27·2	+0·7	−5·3	−20·6
Oct.	−25·4	−17·3	−13·0	−14·4	−14·1	−10·7	−7·7	−4·1	+0·1	+2·1	+2·7	+3·1	+3·3	+7·1	+11·7	+15·7	+22·6	+25·5	+27·9	+18·7	+12·2	−3·9	−15·3	*−26·8*
Nov.	−22·9	−24·0	−17·2	−27·3	*−30·7*	−22·1	−17·1	−12·5	−5·0	−0·5	+3·3	+6·7	+9·7	+14·6	+19·6	+24·4	+25·3	*+29·0*	+27·2	+20·6	+14·5	−1·4	−3·9	−10·3
Dec.	−14·6	−9·5	−10·6	*−14·8*	−14·2	−12·4	−8·1	−6·3	−5·5	−5·6	−2·3	+0·3	+1·3	+5·9	+2·9	+7·7	+12·0	+23·7	*+25·5*	+19·7	+14·2	+4·7	−1·1	−12·9
Year	−25·7	*−26·4*	−24·5	−20·9	−18·0	−14·3	−9·1	−5·3	−1·4	+1·2	+3·8	+5·3	+5·4	+8·8	+13·8	+18·7	+24·2	+27·1	*+27·3*	+23·1	+15·5	+1·3	−10·2	−19·6
Winter	−21·9	*−21·9*	−19·1	−21·1	−21·0	−16·5	−12·1	−9·1	−5·7	−3·3	+0·3	+3·4	+5·7	+10·8	+14·3	+19·1	+25·1	*+28·9*	+26·4	+21·4	+14·8	+1·8	−5·1	−15·3
Equinox	*−29·7*	−27·5	−25·6	−20·5	−20·1	−16·4	−9·5	−4·5	+1·0	+5·3	+7·9	+10·1	+9·7	+10·1	+17·2	+19·9	+25·2	+26·7	*+30·5*	+25·6	+15·9	−3·9	−18·8	−28·6
Summer	−25·5	*−29·8*	−28·7	−21·2	−13·0	−10·1	−5·7	−2·4	+0·5	+1·7	+3·3	+2·4	+0·9	+5·5	+9·9	+16·9	+22·4	*+25·7*	+24·9	+22·3	+15·9	+5·9	−6·6	−15·1

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

53 LERWICK 1941

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−6·0	−4·2	−4·6	−3·6	+0·4	+2·0	+3·2	+3·0	+1·8	−0·2	−3·4	−4·4	−4·2	−2·2	+1·0	−1·2	+1·4	+3·4	+5·4	+4·6	+4·4	+4·8	+1·2	−2·6
Feb.	+2·8	+1·0	−0·5	−1·0	+1·4	+2·4	+2·4	+2·4	+1·5	−6·0	−7·0	−6·4	−6·4	−5·0	−0·9	+1·4	+7·8	+5·0	+2·8	+3·4	−1·7	−1·0	+0·4	+1·2
Mar.	+1·5	−4·6	−2·4	−1·9	+4·6	+4·6	+3·3	+0·4	−8·2	−19·1	−23·2	−23·4	−15·7	−6·6	−0·8	+4·9	+6·6	+8·2	+7·9	+12·6	+12·6	+11·1	+15·4	+12·2
April	+2·8	+3·9	+3·8	+1·3	+0·6	+1·5	−1·2	−2·9	−9·4	−18·7	−23·8	−25·9	−23·6	−12·9	−6·2	−2·3	+9·4	+16·5	+19·8	+18·5	+14·0	+12·9	+11·8	+10·1
May	+1·9	−3·4	−6·7	−6·1	−1·7	+1·2	−0·9	−3·7	−10·9	−20·6	−25·3	−26·9	−21·9	−12·0	−5·7	+6·3	+15·7	+25·0	+28·9	+23·1	+17·3	+10·0	+6·7	+9·7
June	+4·1	+4·4	+5·7	+4·9	+4·5	+0·2	−4·1	−9·5	−16·7	−23·2	−26·3	−30·1	−23·5	−19·6	−9·9	−1·9	+10·7	+24·4	+26·5	+24·7	+19·9	+16·6	+9·7	+8·5
July	+5·7	+2·3	+2·4	+4·5	+5·1	+3·5	−0·1	−5·3	−13·6	−24·7	−31·1	−32·5	−28·5	−22·9	−11·8	+0·1	+10·3	+18·9	+21·7	+23·7	+23·6	+20·7	+15·9	+12·1
Aug.	+6·0	+5·9	+5·8	+4·3	+4·8	+2·3	−0·6	−6·1	−13·4	−23·9	−28·8	−32·1	−30·0	−17·9	−9·2	−1·7	+7·0	+12·9	+20·8	+22·9	+20·8	+19·9	+17·8	+12·5
Sept.	+6·8	+7·3	+4·4	+4·5	+3·2	+0·1	−1·4	−6·7	−14·8	−24·3	−30·2	−28·3	−20·0	−9·7	−3·2	+2·7	+5·6	+11·7	+15·6	+17·5	+15·4	+16·5	+14·0	+13·3
Oct.	+2·4	+0·8	+2·0	+5·0	+5·2	+6·0	+6·8	0·0	−9·8	−19·8	−24·2	−22·4	−17·8	−11·6	−4·0	+0·6	+6·4	+8·2	+11·0	+13·0	+12·4	+10·8	+10·8	+8·2
Nov.	−5·3	−3·6	−2·2	+1·3	+1·8	+3·2	+3·5	+2·6	−0·2	−5·1	−8·2	−9·4	−10·3	−5·6	−2·0	+0·1	+2·8	+5·4	+5·9	+7·2	+9·0	+4·3	+2·2	+2·6
Dec.	−4·2	−4·0	−1·4	0·0	+2·6	+5·1	+3·8	+4·6	+1·6	−2·2	−4·6	−4·2	−2·8	−1·0	+0·2	−2·8	+0·4	+1·1	+1·4	+2·0	+1·6	0·0	+1·8	+1·0
Year	+1·5	+0·5	+0·5	+1·1	+2·7	+2·7	+1·2	−1·8	−7·7	−15·7	−19·7	−20·5	−17·1	−10·6	−4·4	+0·5	+7·0	+11·7	+14·0	+14·4	+12·4	+10·5	+9·0	+7·4
Winter	−3·2	−2·7	−2·2	−0·8	+1·5	+3·2	+3·2	+3·1	+1·2	−3·4	−5·8	−6·1	−5·9	−3·5	−0·4	−0·6	+3·1	+3·7	+3·9	+4·3	+3·3	+2·0	+1·4	+0·5
Equinox	+3·4	+1·9	+1·9	+2·2	+3·4	+3·1	+1·9	−2·3	−10·5	−20·5	−25·3	−25·0	−19·3	−10·2	−3·5	+1·5	+7·0	+11·1	+13·6	+15·4	+13·6	+12·8	+13·0	+10·9
Summer	+4·4	+2·3	+1·8	+1·9	+3·2	+1·8	−1·4	−6·1	−13·7	−23·1	−27·9	−30·4	−26·0	−18·1	−9·1	+0·7	+10·9	+20·3	+24·5	+23·6	+20·4	+16·8	+12·5	+10·7

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·44	−1·57	−2·44	−0·84	−1·38	−1·27	−1·26	−1·00	−0·48	+0·49	+1·38	+2·12	+2·40	+2·37	+1·94	+1·50	+0·96	+0·99	+1·08	+0·66	−0·06	−0·95	−1·52	−1·68
Feb.	−2·68	−2·59	−2·74	−2·11	−1·76	−1·33	−0·70	−0·63	−0·46	+0·47	+1·76	+2·55	+3·34	+2·75	+2·88	+2·19	+2·10	+1·75	+1·72	−0·87	−0·14	−1·13	−1·80	−2·57
Mar.	−2·38	−2·12	−0·74	−1·84	−2·82	−2·73	−2·68	−3·16	−2·76	−1·50	+0·86	+3·70	+5·58	+5·76	+4·00	+2·50	+0·98	+0·37	−0·16	+0·70	+0·26	−0·46	−1·32	−0·04
Apr.	−1·26	−1·31	−1·32	−2·36	−2·88	−2·33	−2·50	−3·46	−3·90	−2·73	−0·56	+2·08	+4·50	+5·59	+4·84	+3·82	+2·92	+1·63	−0·14	+0·02	+0·30	+0·05	−0·60	−0·40
May	−1·20	−0·76	−1·87	−3·90	−5·70	−6·26	−6·32	−5·24	−4·57	−2·82	−0·02	+3·14	+5·36	+6·64	+6·41	+5·30	+4·36	+3·34	+2·50	+2·54	+1·11	−0·42	−0·06	−1·56
June	+0·14	−0·72	−2·71	−3·74	−4·80	−5·58	−5·54	−5·66	−4·53	−3·06	−1·14	+1·28	+3·00	+4·16	+4·91	+4·80	+4·06	+3·62	+3·02	+2·54	+2·49	+1·72	+1·58	+0·16
July	−1·49	−1·85	−2·49	−3·31	−4·55	−6·38	−6·67	−6·31	−5·61	−3·51	−0·65	+2·65	+5·75	+7·35	+7·75	+6·63	+4·95	+3·24	+2·19	+1·67	+1·23	+0·25	−0·49	−0·35
Aug.	−1·08	−1·47	−1·89	−2·62	−3·21	−4·33	−5·12	−5·37	−5·17	−3·76	−0·83	+3·17	+6·34	+7·75	+7·13	+5·28	+3·37	+1·75	+0·60	+0·37	+0·37	+0·72	−0·57	−1·43
Sept.	−1·11	−2·17	−2·14	−2·57	−3·17	−3·69	−3·85	−4·57	−3·72	−1·55	+1·53	+4·03	+5·95	+6·35	+5·36	+2·95	+1·13	+0·43	+0·87	+1·21	+0·90	−0·37	−1·03	−0·77
Oct.	−0·96	−0·83	−1·78	−2·59	−2·19	−2·28	−2·79	−2·65	−2·08	−1·03	+0·32	+2·95	+4·00	+4·59	+4·10	+2·23	+1·43	+1·14	+1·01	+0·89	+0·40	−0·55	−1·26	−2·07
Nov.	−1·87	−1·26	−1·47	−2·10	−1·56	−1·11	−0·92	−0·96	−0·61	−0·26	+0·89	+2·20	+2·61	+2·42	+1·93	+1·70	+1·52	+1·37	+1·04	+0·54	+0·47	−1·62	−1·79	−1·16
Dec.	−1·47	−1·12	−0·75	−0·19	−0·29	−0·94	−0·61	−0·79	−0·97	−0·26	+0·95	+1·97	+2·63	+2·24	+2·41	+1·59	+1·57	+0·70	−0·49	−0·41	−0·95	−1·54	−2·07	−1·21
Year	−1·40	−1·48	−1·86	−2·35	−2·86	−3·19	−3·25	−3·32	−2·91	−1·63	+0·37	+2·65	+4·29	+4·83	+4·47	+3·37	+2·45	+1·69	+1·10	+0·82	+0·53	−0·36	−0·91	−1·09
Winter	−1·87	−1·63	−1·85	−1·31	−1·25	−1·16	−0·87	−0·85	−0·63	+0·11	+1·25	+2·21	+2·75	+2·45	+2·29	+1·75	+1·54	+1·20	+0·84	−0·02	−0·17	−1·31	−1·79	−1·65
Equinox	−1·43	−1·61	−1·49	−2·34	−2·77	−2·76	−2·95	−3·46	−3·11	−1·70	+0·54	+3·19	+5·01	+5·57	+4·57	+2·87	+1·61	+0·89	+0·39	+0·71	+0·47	−0·33	−1·05	−0·82
Summer	−0·91	−1·20	−2·24	−3·39	−4·57	−5·64	−5·91	−5·65	−4·97	−3·29	−0·66	+2·56	+5·11	+6·47	+6·55	+5·50	+4·19	+2·99	+2·08	+1·78	+1·30	+0·57	+0·11	−0·79

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+1·7	−0·1	−0·6	−2·3	−2·9	−1·9	−2·3	−2·1	−2·6	−4·1	−2·9	−1·5	−0·7	+0·9	+1·4	+2·9	+2·5	+1·9	+0·9	+1·9	+1·6	+1·1	+3·5	+3·7
Feb.	−4·5	−7·8	−6·8	−5·7	−6·4	−7·0	−7·7	−8·2	−9·0	−6·7	−6·8	−5·4	−1·5	0·0	+1·6	+2·9	+4·0	+7·6	+13·1	+14·4	+14·2	+12·9	+9·4	+3·4
Mar.	−29·7	−20·9	−16·7	−10·3	−7·7	−4·1	+0·9	+2·9	+3·1	+2·9	+0·9	−0·3	−0·1	+3·5	+7·5	+8·9	+11·1	+12·5	+11·9	+8·1	+7·5	+6·5	+1·1	+0·5
Apr.	−12·4	−7·2	−3·6	−1·2	+0·2	−0·1	−1·0	−2·8	−4·0	−3·8	−2·0	−1·4	−2·2	−1·6	+0·2	+4·0	+4·8	+8·3	+11·0	+9·2	+5·2	+1·2	−0·6	−0·2
May	−5·2	−7·3	−6·8	−10·3	−9·2	−10·1	−4·2	−2·9	−3·8	−4·5	−5·8	−6·5	−5·2	−3·1	+1·4	+4·5	+7·6	+11·7	+15·4	+16·7	+14·8	+10·1	+5·0	−2·3
June	−4·1	−5·9	−2·1	+0·7	+1·1	+1·7	+2·1	+2·1	+1·5	−0·7	−3·1	−4·3	−5·9	−5·1	−3·5	−0·9	−1·3	−0·3	+3·5	+6·3	+7·1	+6·1	+4·1	+0·9
July	−3·1	−0·8	+0·9	+1·6	+3·8	+4·9	+5·2	+3·4	+1·9	+0·2	−3·9	−7·4	−7·9	−5·6	−5·5	−2·8	+0·8	+4·1	+6·2	+5·0	+4·5	+4·8	−2·3	−8·0
Aug.	+2·0	+1·1	−0·6	+1·7	+3·7	+5·4	+4·5	+3·3	+2·2	−0·5	−2·6	−7·9	−9·2	−9·3	−5·6	−1·3	+2·3	+4·6	+4·1	+3·1	+2·6	+0·3	−1·6	−2·3
Sept.	−5·4	−1·9	+1·2	+1·3	+2·9	+4·0	+3·7	+2·9	+1·0	−1·7	−1·2	−3·3	−5·6	−4·7	−1·4	+2·3	+4·5	+3·0	+1·7	+0·7	+0·8	−1·9	−1·6	−1·3
Oct.	−2·4	−2·6	−1·0	+1·0	+1·0	+0·3	−0·6	+0·2	−0·2	+0·2	−1·0	−2·8	−3·0	+0·2	+3·0	+5·8	+5·6	+3·5	+1·0	−0·6	−0·6	−0·6	−1·4	−5·0
Nov.	−2·5	−1·7	−3·2	−4·3	−3·9	−4·9	−4·5	−4·1	−3·4	−1·7	−0·7	+0·1	+0·3	+1·3	+2·4	+3·3	+2·1	+0·7	+0·1	+0·5	+1·4	+8·9	+9·5	+4·3
Dec.	+1·1	+0·6	−1·3	−2·2	−3·2	−2·5	−2·2	−2·6	−3·9	−4·2	−4·5	−4·6	−4·3	−2·4	+0·1	+4·4	+4·0	+4·7	+6·0	+5·2	+5·3	+4·8	+3·5	−1·8
Year	−5·4	−4·5	−3·4	−2·5	−1·7	−1·2	−0·5	−0·7	−1·4	−2·1	−2·8	−3·8	−3·8	−2·2	+0·1	+2·8	+4·0	+5·2	+6·2	+5·9	+5·4	+4·5	+2·4	−0·7
Winter	−1·1	−2·3	−3·0	−3·6	−4·1	−4·1	−4·2	−4·3	−4·7	−4·2	−3·7	−2·9	−1·5	−0·1	+1·4	+3·4	+3·1	+3·7	+5·0	+5·5	+5·6	+6·9	+6·5	+2·4
Equinox	−12·5	−8·1	−5·0	−2·3	−0·9	0·0	+0·7	+0·8	0·0	−0·6	−0·8	−1·9	−2·7	−0·7	+2·3	+5·3	+6·5	+6·8	+6·4	+4·3	+3·2	+1·3	−0·6	−1·5
Summer	−2·6	−3·2	−2·1	−1·6	−0·1	+0·5	+1·9	+1·5	+0·5	−1·4	−3·9	−6·5	−7·1	−5·8	−3·3	−0·1	+2·3	+5·0	+7·3	+7·8	+7·3	+5·3	+1·3	−2·9

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

54 LERWICK 1941

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−17·3	*−36·5*	−12·5	−12·5	−5·9	+5·8	+9·3	+4·7	+1·7	−4·7	−11·9	−4·1	+0·3	+5·1	+6·7	+17·7	*+64·9*	+39·0	+8·7	+3·1	−2·1	−18·1	−18·9	−22·5
Feb.	−24·8	−21·3	−22·6	−17·0	+6·0	+13·1	+15·4	+12·6	+6·8	−4·9	−12·0	−0·4	+7·8	+7·5	+9·2	*+37·2*	+36·4	+24·7	+15·0	+5·8	+11·8	−19·9	*−44·2*	−42·2
Mar.	−76·1	*−196·4*	−82·1	−43·0	−2·8	+26·5	+3·8	+13·6	+5·9	−4·0	+10·5	+15·6	+57·3	*+147·8*	+92·9	+98·2	+21·0	+91·5	+123·2	+37·4	+8·3	−70·4	−137·1	−141·6
Apr.	−16·2	−31·6	−11·6	−7·6	−3·8	−30·1	−24·6	−26·6	−27·0	−37·6	−43·0	−30·8	−15·6	+15·2	+59·4	+71·4	*+95·2*	+89·7	+50·4	+33·8	−3·6	−15·0	−44·2	*−46·2*
May	−10·0	*−37·8*	−26·9	−28·4	−18·0	−25·4	−25·4	−34·2	−32·7	−29·4	−16·8	−8·2	+2·6	+17·2	+24·7	+30·0	+33·8	+53·2	*+61·6*	+52·6	+45·1	−0·4	−15·4	−11·8
June	−28·9	−27·0	−21·5	−13·4	−9·4	−11·3	−14·6	−26·6	−34·1	*−46·0*	−40·9	−19·6	−6·3	0·0	+23·7	+28·2	+48·4	+56·5	*+60·0*	+54·2	+34·3	+14·4	+1·5	−21·6
July	−39·7	−46·7	−126·7	−78·1	−38·7	−0·6	−102·3	*−175·9*	−144·5	−72·3	+19·9	+50·1	+39·5	+146·1	+164·3	*+175·5*	+57·3	+53·4	+64·9	+57·3	+49·1	−31·9	−15·9	−4·1
Aug.	−105·6	−92·9	−25·8	+8·9	−24·6	−14·1	−10·4	−27·9	−48·4	−59·3	−57·0	−24·1	+17·4	+87·9	+164·2	+162·7	*+165·2*	+131·5	+83·8	+50·3	−21·4	−77·1	−110·2	*−173·1*
Sept.	−178·6	−119·9	−173·5	−154·4	−178·7	−98·9	−76·8	−12·3	+16·1	+54·2	+74·5	+132·5	+170·4	*+249·7*	+230·1	+187·2	+195·1	+123·7	+32·6	−29·5	−129·9	−47·2	−77·9	*−188·5*
Oct.	−12·4	+5·1	−13·6	−13·1	+17·4	+16·5	−0·8	−3·1	−6·2	−10·1	−17·8	−14·7	−3·0	+2·3	+7·4	+18·1	+47·0	*+118·9*	+91·0	+72·7	+22·2	−59·3	*−146·2*	−118·3
Nov.	*−108·1*	−86·6	−67·7	−28·3	−27·3	−38·8	−45·5	−33·1	−25·1	−22·0	−0·7	+23·1	+33·5	+49·6	+69·5	+66·9	*+103·7*	+79·6	+76·7	+16·3	+10·7	−32·0	−11·7	−2·7
Dec.	−29·9	−21·5	−26·1	−40·7	−23·3	−13·0	−0·7	−0·5	−6·3	−2·9	−3·7	+2·9	+4·7	+27·1	+107·3	*+110·3*	+72·7	+37·8	+19·1	−16·5	−20·5	*−83·7*	−35·9	−56·7
Year	−54·0	−59·4	−50·9	−35·6	−25·8	−14·2	−22·7	−25·8	−24·5	−19·9	−8·2	+10·2	+25·7	+63·0	+79·9	*+83·6*	+78·4	+75·0	+57·3	+28·1	+0·3	−36·7	−54·7	*−69·1*
Winter	*−45·0*	−41·5	−32·2	−24·6	−12·6	−8·2	−5·4	−4·1	−5·7	−8·6	−7·1	+5·4	+11·6	+22·3	+48·2	+58·0	*+69·4*	+45·3	+29·9	+2·2	0·0	−38·4	−27·7	−31·0
Equinox	−70·8	−85·7	−70·2	−54·5	−42·0	−21·5	−24·6	−7·1	−2·8	+0·6	+6·1	+25·7	+52·3	+103·7	+97·5	+93·7	+89·6	*+105·9*	+74·3	+28·6	−25·7	−48·0	−101·3	*−123·7*
Summer	−46·1	−51·1	−50·2	−27·7	−22·7	−12·9	−38·2	*−66·1*	−64·9	−51·7	−23·7	−0·5	+13·3	+62·8	+94·2	*+99·1*	+76·2	+73·7	+67·6	+53·6	+26·8	−23·7	−35·0	−52·7

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·93	+1·95	−4·48	−0·13	+2·41	+0·99	+1·35	+3·11	+2·54	+4·75	+2·97	+3·77	+5·39	+5·47	+4·42	*+5·75*	−1·07	*−8·51*	−3·21	−8·37	−4·40	−4·35	−6·97	−4·31
Feb.	−0·41	−4·24	−0·43	+1·02	−0·64	+0·27	+1·86	+2·68	+3·29	+3·60	+4·65	+5·46	+7·47	+9·*02*	+7·17	+3·80	−3·52	−4·85	−5·82	−2·38	−4·57	−7·68	*−9·25*	−6·50
Mar.	−3·99	−16·39	−11·59	−9·91	+0·19	+0·50	+3·55	+0·85	−1·69	−0·61	+2·85	+7·49	+9·03	+7·89	+6·07	+2·95	+3·65	*+18·06*	+11·79	+5·01	−8·79	−0·07	−8·93	*−17·91*
Apr.	−3·44	−2·91	−3·91	−3·66	−3·13	+1·59	+3·98	−0·47	−2·21	−0·54	+2·33	+4·71	+7·86	*+9·63*	+7·33	+6·98	+4·79	+6·73	−4·88	−2·51	−3·53	−6·32	*−10·39*	−8·03
May	−3·33	−5·29	−7·27	−6·28	−2·09	+0·89	+0·69	−1·43	−2·18	−1·35	+0·05	+3·05	+5·85	+6·17	+6·90	*+7·07*	+5·97	+5·85	+4·53	+2·13	−2·74	−2·93	*−8·19*	−6·07
June	−5·47	−8·16	*−11·50*	−9·63	−7·80	−7·02	−4·49	−4·10	−1·76	+0·29	+2·56	+4·06	+7·05	+8·80	+8·08	*+9·63*	+7·76	+5·98	+5·33	+3·94	+1·88	+0·07	−1·80	−3·70
July	+2·03	−1·27	+6·03	−3·99	−0·15	+1·94	+4·15	−8·05	−8·93	−0·89	−14·27	*−20·13*	−10·89	−8·43	−3·09	+1·93	+9·07	+10·72	*+11·91*	+9·53	+6·99	+7·73	+4·75	+3·31
Aug.	−4·40	−3·12	−2·54	−4·16	−4·20	−4·07	−2·50	−2·32	−0·68	+3·58	+4·80	+4·68	+5·44	+5·36	+6·38	+6·68	*+7·60*	+4·45	+2·52	+0·70	+0·40	−2·86	−9·70	*−12·04*
Sept.	−7·95	−15·37	*−24·66*	−22·13	−18·67	−8·05	−2·53	+4·55	+4·90	+5·01	+0·09	−5·71	+5·89	+6·45	+10·24	+18·65	*+23·33*	+17·71	+16·95	+12·93	+1·68	−3·79	+4·25	−23·77
Oct.	−3·98	−2·96	−3·88	−0·30	−3·18	−3·01	−0·24	+1·76	+0·38	−1·58	+0·54	+3·86	+6·52	+8·76	*+8·80*	+7·74	+7·74	+6·63	−1·08	+2·78	−5·00	*−10·86*	−9·60	−9·84
Nov.	−6·27	−7·42	*−9·77*	−8·63	+0·01	+0·86	*+7·87*	+7·35	+1·53	+3·26	+3·11	+3·39	+5·31	+7·76	+4·31	+5·35	+5·89	+2·56	−5·19	−4·33	−4·41	−6·18	−3·21	−3·15
Dec.	−4·85	*−5·78*	−4·85	−2·74	−0·82	−1·35	−1·32	−0·24	+1·81	+2·18	+1·59	+4·66	+5·73	+5·66	+3·03	+5·84	*+5·98*	+0·39	+1·54	−3·76	−1·89	−4·94	−4·33	−1·54
Year	−3·43	−5·91	−6·57	−5·88	−3·17	−1·37	+1·03	+0·31	−0·25	+1·47	+0·94	+1·61	+5·05	+6·05	+5·80	*+6·86*	+6·43	+5·48	+2·87	+1·31	−2·03	−3·51	−5·28	*−7·80*
Winter	−2·65	−3·87	−4·88	−2·62	+0·24	+0·19	+2·44	+3·23	+2·29	+3·45	+3·08	+4·32	+5·97	*+6·98*	+4·73	+5·19	+1·82	−2·60	−3·17	−4·71	−3·82	−5·79	*−5·94*	−3·87
Equinox	−4·84	−9·41	−11·01	−9·00	−6·20	−2·24	+1·19	+1·67	+0·35	+0·57	+1·45	+2·59	+7·33	+8·18	+8·11	+9·08	+9·88	*+12·28*	+5·69	+4·55	−3·91	−5·26	−6·17	*−14·89*
Summer	−2·79	−4·46	−3·82	*−6·01*	−3·56	−2·07	−0·54	−3·97	−3·39	+0·41	−1·71	−2·09	+1·86	+2·97	+4·57	+6·33	*+7·60*	+6·75	+6·07	+4·07	+1·63	+0·50	−3·73	−4·63

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−60·4	*−70·5*	−50·0	−37·7	−39·0	−34·9	−25·2	−19·7	−12·8	−10·5	−2·8	+2·1	+8·4	+25·3	+24·2	+42·5	*+112·6*	+111·3	+72·4	+44·9	+27·4	−15·9	−26·6	−65·1
Feb.	−64·4	−64·1	−49·0	−35·5	−23·0	−21·1	−20·6	−8·9	−4·2	+1·7	+9·2	+10·7	+20·4	+35·7	+57·8	+67·7	+80·2	*+81·3*	+55·4	+43·7	−1·8	−28·3	−58·8	*−84·1*
Mar.	−40·5	−48·7	*−100·1*	−51·1	−55·7	−51·9	−33·9	−19·3	+19·9	+53·9	+74·9	*+88·7*	+77·7	+57·1	−3·5	+22·3	+17·5	−14·3	+24·7	+44·9	+9·9	−3·9	−34·1	−34·5
Apr.	−27·5	−21·1	−34·5	−35·3	−24·7	−36·0	−44·3	−25·5	−6·1	+2·7	+5·7	+7·1	+11·1	+24·3	+47·7	+50·9	*+64·1*	+55·4	+62·7	+34·3	+28·3	+0·1	−57·9	*−81·5*
May	−31·3	−58·3	−55·1	*−62·3*	−47·1	−58·4	−36·3	−11·7	−4·7	+7·9	+20·3	+29·7	+36·7	+51·5	*+54·9*	+47·1	+44·9	+43·8	+39·9	+36·5	+33·9	−2·5	−27·7	−51·7
June	−39·0	−49·7	*−68·8*	−54·9	−34·3	−20·6	−11·5	−2·7	−1·2	+4·9	+6·0	+11·7	+12·4	+16·7	+21·0	+34·1	+39·5	*+50·4*	+45·9	+34·1	+27·8	+12·1	−10·6	−23·3
July	−26·0	−47·7	*−133·6*	−113·7	−57·4	−30·9	−34·2	−20·1	+12·2	+30·3	+57·0	+29·1	−34·2	−26·9	−31·0	+7·3	+66·6	+67·1	*+69·8*	+68·3	+60·2	+35·7	+28·4	+23·7
Aug.	−76·2	−103·1	−87·0	−56·4	−53·6	−74·3	−40·0	−16·4	−1·8	+8·1	+22·4	+43·2	+62·0	+78·3	+73·2	+109·8	+104·8	*+113·3*	+99·2	+73·2	−4·8	−50·3	*−116·8*	−106·8
Sept.	+13·0	−20·6	−38·3	−40·0	*−136·0*	−121·4	−49·4	−43·2	−19·1	+5·0	+28·8	+63·4	+38·6	−29·8	+39·1	−45·0	−49·0	−1·6	+60·8	+113·8	*+121·5*	+40·0	+66·8	+2·6
Oct.	−45·0	−35·3	−32·2	−47·1	−45·2	−30·7	−23·4	−13·7	+1·0	+9·9	+14·8	+20·1	+22·4	+29·9	+33·6	+38·3	+65·8	+92·5	*+95·2*	+43·1	+21·2	−40·3	−78·2	*−96·7*
Nov.	−44·8	−42·9	−19·8	−89·1	*−123·8*	−99·5	−74·8	−54·1	−23·4	−5·7	+12·0	+26·1	+38·0	+55·1	+65·2	+78·3	+91·6	*+116·5*	+89·0	+51·1	+25·6	−19·5	−19·2	−31·9
Dec.	−42·0	−25·9	−36·3	*−51·8*	−48·5	−36·1	−8·6	−0·1	+3·5	+3·6	+16·3	+26·5	+23·4	+40·9	+6·1	+22·2	+27·9	*+60·7*	+45·4	+31·9	+15·7	−20·0	−20·3	−34·5
Year	−40·3	−49·0	*−58·7*	−56·2	−57·4	−51·3	−33·5	−19·6	−3·1	+9·3	+22·1	+29·9	+26·4	+29·8	+32·4	+39·6	+55·5	*+64·7*	+63·4	+51·7	+30·4	−7·7	−29·6	−48·7
Winter	−52·9	−50·9	−38·8	−53·5	*−58·6*	−47·9	−32·3	−20·7	−9·2	−2·7	+8·7	+16·3	+22·5	+39·3	+38·3	+52·7	+78·1	*+92·5*	+65·5	+42·9	+16·7	−20·9	−31·2	−53·9
Equinox	−25·0	−31·4	−51·3	−43·4	*−65·4*	−60·0	−37·7	−25·4	−1·1	+17·9	+31·1	+44·8	+37·5	+20·4	+29·2	+16·6	+24·6	+33·0	*+60·9*	+59·0	+45·2	−1·0	−25·9	−52·5
Summer	−43·1	−64·7	*−86·1*	−71·8	−48·1	−46·1	−30·5	−12·7	+1·1	+12·8	+26·4	+28·4	+19·2	+29·9	+29·5	+49·6	+63·9	*+68·7*	+63·7	+53·0	+29·3	−1·3	−31·7	−39·5

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1941

The ranges are derived from the diurnal inequalities printed in Tables 52 to 54

55 LERWICK 1941

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	24.0	7.79	53.8	11.4	4.84	7.8	101.4	14.26	183.1
Feb.	28.0	10.19	63.9	14.8	6.08	23.4	81.4	18.27	165.4
Mar.	85.2	11.79	80.4	38.8	8.92	42.2	344.2	35.97	188.8
Apr.	56.4	11.48	52.8	45.7	9.49	23.4	141.4	20.02	145.6
May	62.1	11.08	57.4	55.8	12.96	27.0	99.4	15.26	117.2
June	70.1	13.21	42.1	56.6	10.57	13.0	106.0	21.13	119.2
July	77.4	11.14	58.6	56.2	14.42	14.2	351.4	32.04	203.4
Aug.	96.5	13.35	77.2	55.0	13.12	14.7	338.3	19.64	230.1
Sept.	88.6	14.50	68.8	47.7	10.92	10.1	438.2	47.99	257.5
Oct.	47.9	10.70	54.7	37.2	7.38	10.8	265.1	19.66	191.9
Nov.	50.8	8.48	59.7	19.3	4.71	14.4	211.8	17.64	240.3
Dec.	31.6	7.63	40.3	9.7	4.70	10.6	194.0	11.76	112.5
Year	45.3	9.20	53.7	34.9	8.15	11.6	152.7	14.66	123.4
Winter	28.7	8.38	50.8	10.4	4.62	11.6	114.4	12.92	151.1
Equinox	56.4	11.44	60.2	40.7	9.03	19.3	229.6	27.17	126.3
Summer	66.5	11.72	55.5	54.9	12.46	14.9	165.2	13.61	154.8

AVERAGE DEPARTURE

Arithmetical averages of diurnal inequalities in Tables 52 to 54 taken regardless of sign

56 LERWICK 1941

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	5.3	2.01	13.3	3.1	1.32	2.0	13.9	3.82	39.3
Feb.	7.1	2.31	18.6	3.0	1.79	7.0	17.4	4.19	38.7
Mar.	18.9	2.87	24.7	8.8	2.06	7.5	62.8	6.66	41.0
Apr.	13.1	2.83	14.8	10.6	2.15	3.7	34.6	4.66	32.9
May	15.1	3.32	14.4	12.1	3.39	7.3	26.7	4.10	37.3
June	16.4	4.05	9.7	13.7	3.12	3.1	26.8	5.45	26.4
July	20.3	3.33	12.4	14.2	3.64	3.9	73.1	6.67	46.3
Aug.	22.3	3.58	18.2	13.6	3.07	3.4	72.7	4.38	65.6
Sept.	21.8	4.12	16.6	11.5	2.56	2.5	122.2	11.05	49.5
Oct.	10.8	2.71	12.7	9.1	1.92	1.8	34.9	4.63	40.7
Nov.	9.9	2.30	16.2	4.3	1.39	2.9	44.1	4.88	54.0
Dec.	6.6	2.03	9.8	2.3	1.17	3.3	31.8	3.20	27.0
Year	12.5	2.74	14.6	8.1	2.22	3.1	41.8	3.77	37.9
Winter	6.8	2.09	14.3	2.9	1.37	3.6	24.3	3.66	39.5
Equinox	14.4	3.08	17.1	9.7	2.15	3.1	56.5	6.08	35.0
Summer	17.7	3.48	13.2	13.0	3.27	3.4	47.3	3.56	39.6

NON-CYCLIC CHANGE

57 LERWICK 1941

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0.4	0.00	+0.1	+3.7	−0.01	+1.8	−11.9	−2.06	−28.5
Feb.	+0.2	−0.12	−0.8	−2.1	+0.40	0.0	−7.0	−0.17	−20.7
Mar.	−0.5	−0.05	+1.2	+10.1	+1.91	+29.4	−13.7	+0.40	+6.8
Apr.	+0.1	+0.06	0.0	+7.7	+0.89	+10.1	−27.2	−2.88	−48.0
May	+0.1	+0.04	−0.6	+5.9	+0.50	+2.7	−13.0	−1.99	−15.0
June	+0.7	−0.04	−0.9	+1.8	−0.06	+4.7	−4.5	−0.38	−0.1
July	−0.5	−0.11	+0.8	+2.5	+0.33	−6.1	−8.7	−0.48	+3.6
Aug.	−0.3	0.00	+0.5	+4.9	−0.81	−4.8	−156.5	−3.71	−60.9
Sept.	−0.2	−0.05	+0.5	+6.8	+0.24	+14.4	−9.6	+0.5	+9.3
Oct.	−15.5	−0.67	−3.5	+3.1	−1.48	−3.1	−102.5	−4.42	−39.8
Nov.	+15.8	+0.64	+4.5	+5.3	+1.25	+6.1	+64.7	+1.35	−14.6
Dec.	+0.2	+0.05	−0.8	+4.7	+0.70	−6.3	+2.6	+0.94	+6.4
Year	0.0	−0.02	+0.1	+4.5	+0.32	+4.1	−23.9	−1.11	−16.8
Winter	+4.1	+0.14	+0.7	+2.9	+0.59	+0.4	+12.1	+0.01	−14.3
Equinox	−4.0	−0.18	−0.5	+6.9	+0.39	+12.7	−38.3	−1.71	−17.9
Summer	0.0	−0.03	−0.1	+3.8	−0.01	−0.9	−45.7	−1.64	−18.1

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, a, quiet, q, and disturbed, d, days for H, D and V and for all days for N, W, I and T

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	14,000γ +			12° +			46,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	386	393	380	6.0	6.3	5.7	873	868	877	14066	3015	72 56.3	49031
Feb.	383	388	377	5.0	5.6	3.9	869	873	864	14064	3011	72 56.4	49025
Mar.	363	379	327	3.1	4.2	1.2	874	879	844	14046	2999	72 57.8	49025
Apr.	378	380	376	3.1	2.7	3.4	877	881	874	14061	3002	72 56.9	49032
May	388	388	379	2.6	1.6	2.7	871	879	854	14071	3002	72 56.1	49030
June	390	393	380	1.7	1.8	1.8	874	880	872	14074	2999	72 56.0	49033
July	376	380	346	0.2	0.6	−2.8	882	891	851	14062	2990	72 57.1	49037
Aug.	379	383	374	−0.1	0.2	−0.8	889	892	881	14065	2989	72 57.1	49044
Sept.	353	376	258	−2.0	−0.4	−6.3	896	896	895	14041	2976	72 59.0	49043
Oct.	372	377	367	−1.8	−1.2	−2.5	899	900	885	14059	2981	72 57.8	49052
Nov.	371	381	353	−3.1	−2.4	−3.6	903	901	904	14060	2975	72 57.9	49055
Dec.	380	385	373	−3.1	−2.5	−4.5	901	900	888	14068	2977	72 57.3	49056
Year	377	384	358	1.0	1.4	−0.1	884	887	874	14062	2993	72 57.1	49039

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

59 LERWICK 1941

Night commencing			
			JANUARY
1		⌓	Diffuse surface seen through gaps in cloud from 18h.
2	a-c	..	Fine until 20h., then mainly overcast
3	c	..	Cloudy
4	cb-b	..	Low cloud decreasing. Much cirrus
5	cb	..	Variable cloud. Moonlight
7	b	⌓	Aurora from 17h.25m., active until 18h. Bright moonlight
8	b	..	Fine. Bright moonlight
9	c	..	Mainly overcast
10	c	..	Mainly overcast
12	b-cb	..	Variable cloud. Bright moonlight
13	b-c	..	Fine early, then mainly overcast. Bright moonlight
14	cb	..	Very cloudy. Bright moonlight
15	cb	..	Cloudy, fine intervals. Moonlight
16		⌓	Diffuse surface in early evening. Cloudy
17		⌓	Aurora from 18h.20m. Active red and green rays at 21h., otherwise little activity. Cloud
18	a	⌓	Quiet arch most of evening. Fine
19	a	⌓	Faint glow all evening. Fine
20		⌓	Diffuse surface from dusk, obscured by cloud at 19h.40m.
21		⌓	Diffuse surface from dusk, obscured by cloud at 19h.20m.
23		⌓	Diffuse surface seen through small break in cloud at 19h. Overcast rest of evening
24		⌓	Diffuse surface all evening. Cloudy
25		⌓	Diffuse surface all evening, largely obscured by cloud
26		⌓	Quiet aurora from 20h. Some rays at 21h. Fair
27	c	..	Overcast apart from a few breaks before 19h.
28	c	..	Mainly overcast
			FEBRUARY
2	b-c-a	⌓	Moonlight and cirrus cloud in early evening. Glow at 6h.20m. on the 3rd.
3		⌓	Quiet aurora most of evening. Cloud increasing
4	b-cb	..	Cloud increasing. Moonlight
6	cb	..	Very cloudy. Moonlight
8	b	⌓	Fine from 19h. Bright rays at 21h. Bright moonlight
9	cb	..	Very cloudy. Bright moonlight
10	b	..	Fine. Bright moonlight
11	b	..	Fine. Bright moonlight
12	cb	..	Mainly overcast. Moonlight
13	c	..	Mainly overcast
14	a-ca	..	Fine, becoming cloudy
17		⌓	Faint glow at times. Cloudy
18		⌓	Diffuse surface all evening. Variable cloud
19	a	..	Cloudy, becoming fine
20	c	..	Overcast apart from small break before 19h.
21	b	⌓	Diffuse surface most of evening. Haze
22	b	⌓	Diffuse surface seen at clear intervals. Haze
24	a	⌓	Fine. Aurora all evening, slight activity at times
25	cb	..	Very cloudy. Much cirrus
26	cb	..	Cloudy. Haze
28	b	..	Little cloud but hazy
			MARCH
1		⌓	Bright active coloured display from 19h. Cloudy
2	b	⌓	Crescent moon. Extensive quiet aurora from 20h. Cloudy
3	b	⌓	Arch seen when sky cleared at 20h.40m.
5		⌓	Moderate aurora largely obscured by cloud
6	cb-b	..	Cloud decreasing. Moonlight

Night commencing			
			MARCH (contd.)
7	cb	..	Very cloudy until 20h., then overcast. Moonlight
8	b	⌓	Moonlight and low haze. Rays seen at 21h. by observer a few miles west of Lerwick
10	c	..	Mainly overcast
11	c	..	Mainly overcast
12	c	..	Mainly overcast
13	b	⌓	Full moon. Diffuse surface all evening. A few rays at times. Mainly fine
14	b	⌓	Fine. Bright moonlight. Fairly good display from 21h. Red and green curtains followed by pulsating and flaming aurora
15	a	⌓	Fine. Arch developed at 20h.35m. and became rayed at 21h.20m.
19		⌓	Diffuse surface seen through gaps in cloud from 21h.15m.
21		⌓	Variable cloud. Glow from 20h.30m. Pulsating surfaces at 23h.15m.
22		⌓	Faint diffuse surface seen between cloud from 20h.
23		⌓	Diffuse surface all evening, obscured by cloud at times
25	a	⌓	Faint glow all evening. Cloudy
26	a	..	Fine
27	a	..	Mainly fine
28	a	⌓	Mainly fine. Bright active coloured display from 20h.
29		⌓	Cloudy. Moderate display from 20h.35m.
30	a	⌓	Fine. Brilliant coloured display from 20h.35m. Very bright violet and green corona at 21h.43m. Much flaming aurora
31	a	⌓	Fine. Diffuse surface at 21h. Homogeneous arch formed at 23h.15m. and became rayed at 23h.20m.
			APRIL
1	b-c	..	Crescent moon in early evening. Cloud increasing
2	c	..	Mainly overcast
4	c	..	Mainly overcast
5	cb	..	Mainly overcast. Moonlight
6	cb	..	Very cloudy. Moonlight
7	b	⌓	Fine. Moonlight. Fairly bright but quiet aurora from dusk
8	b	..	Impossible to decide if aurora was present owing to bright moonlight and disposition of cloud
9	b	..	Mainly fine. Bright moonlight
14		⌓	Diffuse surface between clouds from 21h.30m.
15	a	⌓	Fine. Faint glow at 21h.40m. More extensive from 22h.
16	c	..	Mainly overcast
17	a	⌓	Fine. Faint glow after 21h.45m.
18	a	⌓	Mainly fine. Diffuse surface seen from 21h.20m.
21	c	..	Mainly overcast
22	a	..	Fine
23	ca	..	Cloud increasing after twilight
25		⌓	Mainly overcast but bright aurora seen through thinner parts of cloud
26		⌓	Diffuse surface seen when cloud cleared after 22h.
27	a	..	Fine
28	cb	..	Mainly overcast. Much cirrus
29	b	..	Fine. Twilight until end of watch
30	cb	..	Cloudy
			AUGUST
28	a	⌓	Fine. Glow all night. Arch and faint rays at times
31	b	⌓	Fine. Moonlight. Rayed arch at 21h.30m.

Night commencing			
			SEPTEMBER
1	cb	..	Mainly overcast. Moonlight
2	b-cb	..	Cloudy, becoming overcast. Moonlight
4	b	⌓	Very cloudy. Moonlight. Diffuse surface seen after 21h.30m.
5	cb	..	Mainly overcast. Bright moonlight
6	b	..	Mainly fine. Full moon
7	b	..	Mainly fine. Bright moonlight
10	cb	..	Cloudy, overcast at times. Bright moonlight
17	c	..	Overcast apart from small gap before 20h.
18		⌓	Brilliant display visible when cloud cleared after 21h.30m. Green and red rays extended to south horizon at 22h.15m. Very cloudy, becoming fine
19		⌓	Fine, becoming mainly overcast after 21h.30m. Bright active coloured display from dusk
23	cb	..	Overcast apart from a short clearance at 20h.30m. Mist
28	c	..	Overcast apart from small break after 21h.
30	b	⌓	Fine, becoming cloudy. Moonlight. Diffuse surface seen after 20h.
			OCTOBER
1	c	..	Overcast apart from a few breaks before 20h.
2	a-b	⌓	Bright moonlight after 20h. Diffuse surface from 20h. Some activity at 22h.
4	b	⌓	Very cloudy, becoming fine. Moonlight. Glow seen from 20h.10m. to 20h.25m.
5	b-c	..	Moonlight. Cloud increasing
7	b	..	Moonlight and haze
9	b	..	Cloudy. Moonlight
10	a-b	⌓	Fine, then cloudy and moonlight. Diffuse surface all evening
11	a-b	⌓	Fine. Moonlight from 20h.30m. Aurora all evening. Considerable activity from 19h. to 19h.30m.
12	c	..	Overcast apart from a few gaps before 19h.
14	a	⌓	Cloudy, becoming fine 19h.30m. Diffuse surface from 20h.15m. Some rays at 21h.20m.
16		⌓	Faint glow through gaps in cloud all evening
17		⌓	Diffuse surface from 20h., masked by cloud
18		⌓	Diffuse surface behind cloud from 18h.50m.
19	c-a	..	Overcast until 21h., then clearing
20		⌓	Faint glow through gaps in cloud all evening
21	a	..	Fine
22		⌓	Good display from 20h.55m. Cloudy becoming fine at 21h.
23		⌓	Quiet aurora seen through gaps in cloud all evening
25		⌓	Faint diffuse surface from 18h.30m. Overcast from 20h.
27		⌓	Faint glow seen when cloud cleared at 22h.45m.
28	b	⌓	Diffuse surface, partly concealed by cloud, from 19h.30m. Moonlight
29	cb	..	Cloudy. Bright moonlight
30		⌓	Glow seen at 19h.30m. Overcast rest of evening. Bright moonlight
31	b	⌓	Much auroral activity behind cloud all evening. Bright moonlight Moderate display seen from 4h.35m. on following morning when cloud had cleared

59 LERWICK (contd.) 1941

Night commencing				Night commencing				Night commencing			
			NOVEMBER				NOVEMBER (contd.)				DECEMBER (contd.)
1	b	⌓	Variable cloud. Moonlight. Diffuse surface from 19h.	29	b	..	Cloudy with fine periods	11	cb	..	Variable cloud, becoming overcast. Haze or cirrus
2	cb	..	Mainly, overcast. Moonlight					12	a	⌓	Fine after 18h. Diffuse surface at 22h.40m.
3	cb	..	Mainly overcast. Moonlight				DECEMBER	14		⌓	Glow visible when cloud cleared at 22h.15m.
4	b	..	Cloudy, fine intervals. Moonlight					15	ca	..	Overcast until 20h., then variable cloud
5	cb	..	Overcast until 21h. then breaking slightly. Moonlight	1	cb-b	⌓	Practically overcast until 22h. then clearing. Auroral activity suspected behind cloud at times. Rays extending to zenith seen at 23h.45m. Moonlight	16		⌓	Variable cloud. Glow seen through cloud at 20h.30m.
6	cb	..	Overcast until 21h. then breaking slightly. Moonlight					17		⌓	Diffuse surface all evening. Fine becoming very cloudy
7	cb	..	Cloudy until 19h. then overcast. Moonlight	3	b-cb	..	Fine early then mainly overcast. Full moon	19	a-b-a	..	Mainly fine, cirrus at times
8	cb	..	Overcast apart from small breaks after 21h. Moonlight	4	b	⌓	Very cloudy. Full moon. Rayed arch seen in cloud break at 20h.40m.	21	ca	..	Overcast until 21h., then variable cloud
15	ca	..	Variable cloud	5	b	⌓	Short spell of bright active aurora 19h.5m. to 19h.10m. Bright moonlight and cirrus	22	a	..	Mainly fine
16	ca-c	..	Cloudy, overcast from 20h.					23	cb	..	Cloudy until 19h., then overcast, moonlight
19		⌓	Diffuse surface seen through gaps in cloud at 21h.15m., overcast remainder of evening. Auroral light behind cloud					24	cb	..	Variable cloud, moonlight
20		⌓	Aurora seen in slight break in cloud at 17h.30m., overcast rest of evening	6		⌓	Diffuse surface from 17h.20m. often obscured by cloud and masked by moonlight after 19h.	25	b-cb	..	Fine until 19h., then practically overcast. Bright moonlight
25	cb	..	Cloud varying. Moonlight	7	c-cb	..	Mainly overcast. Bright moonlight after 20h.	26	b-cb-b	..	Fine, apart from very cloudy spell at 21h. Bright moonlight
27		⌓	Overcast until 22h. Some activity seen at 5h.50m. on following morning	8	c	..	Overcast apart from small break at 20h.	27	cb	..	Cloudy, bright moonlight
28	b	⌓	Fine. Moonlight. Active coloured display from 18h.5m.	9	ca	..	Variable cloud becoming practically overcast	28	cb	..	Variable cloud, bright moonlight
								29	cb	..	Very cloudy, bright moonlight
								30	cb	..	Mainly overcast, bright moonlight
								31	cb	..	Mainly overcast, bright moonlight

In the interests of brevity there have been omitted from Table 59 all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol ⌓. The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol .. ; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora.

The letters a, b, c, have the following significance:-

a = Conditions favourable for seeing aurora
b = Unfavourable for faint aurora (moonlight, mist, Cs, etc.) but not such as to mask bright aurora
c = Cloudy, but aurora not seen in clear intervals
ca, cb = Have been used for "Cloudy, with conditions a or b in the intervals"
Changing conditions have been indicated by a hyphen, e.g., a-c

60 OTHER SCOTTISH STATIONS

Night commencing		Night commencing		Night commencing	
	JANUARY		APRIL (contd.)		SEPTEMBER (contd.)
1	Abbotsinch; Wick	25	McArthur's Head 0h.30m.(26th)		north, 23.-1h.(21st); Rhinns of Islay
2	Abbotsinch; Wick	26	Kettins		brilliant display, 20h.30m.-23h.;
6	Wick	29	Craigston; Leuchars		Sumburgh Head; Treen House; West Linton;
14	Fort Augustus				Wick
17	Abbotsinch; A.; Arbroath; B.; Buddonness;			21	Cape Wrath 22h.-4h.30m.(22nd); E.; Fortrose;
	Carbost 21h.-24h.; Dunfermline; Duntuilm;				McArthur's Head to east at 24h.; Nairn;
	E.; Edinburgh; Leuchars; St. Abbs Head;		MAY		Rona 2h.-4h.(22nd); Sumburgh Head;
	Ushenish 21h.-22h.; Wick				Treen House; Tiumpan Head 4h.(22nd) to
18	Abbotsinch; B.; Copinsay; Wolfelee		Nil		daylight
19	Abbotsinch; Copinsay			22	Nairn; Wick
20	Abbotsinch; Stour Head			24	Nairn; Tiumpan Head 22h.40m.-23h.15m.
25	B.			29	Balfron; K.; Wick
27	A.		JUNE	30	Duntuilm
			Nil		
					OCTOBER
	FEBRUARY				
				11	A,; Buddonness; Cape Wrath 22h.-1h.(12th),
3	A.; E.; Kinnaird Head 22h.-22h.30m.;		JULY		2h.-4h.30m.(12th); Copinsay; Devaar
	Treen House; faint glow at 22h.; Wick				19h.30m.-22h.; Dunfermline; E.; Fortrose;
4	Abbotsinch; Wick	27	Abbotsinch		Kettins; Leuchars; Nairn; Paisley; Rona
21	Abbotsinch; McArthur's Head 22h.; Wick	28	Abbotsinch		19h.-22h.; St. Abbs Head; Sumburgh;
22	Abbotsinch; K.				Treen House
24	Wick			12	Arbroath
			AUGUST	14	Perth
				16	A.; Buddonness
	MARCH	26	A.; Abbotsinch; Leuchars; McArthur's Head;	18	Hoy High 22h.-0h.30m.(19th)
			Nairn; St. Abbs Head.	19	A.
1	A.; B.; Braemar; Buddonness; Carnoustie;	27	Leuchars; Nairn; St. Abbs Head; Wick	21	Ailsa Craig
	Duntuilm; Edinburgh, vivid display	28	Ailsa Craig; St. Abbs Head; Wick	22	A.; Balerno; Devaar 19h.30m.-23h.;
	19h.15m.-20h.15m. E.; Fortrose; Kettins;	31	B.; 0h.40m. (1st September)		Edinburgh; E.; Kettins; Kilmarnock;
	Kilmarnock; Kinnaird Head 19h.30m.-2h.				McArthur's Head 18h.30m.-23h.45m.;
	(2nd); Leuchars Marchmont; Nairn;				Paisley; Rothesay; Swinton House;
	Noup Head 20h.-4h.(2nd); Paisley;				Treen House; Ushenish 20h.-20h.45m.
	St. Abbs Head; Treen House; Stour Head		SEPTEMBER		Wick
	19h.30m.-3h.(2nd); Wick			23	A.; Cape Wrath 21h.-23h.30m. Craibstone;
2	Arbroath; Cape Wrath	14	Buddonness; Duntuilm; Treen House		Greenock; Kettins; Nairn; Rudh Re
4	A.; St. Abbs Head; Wick	15	A.; Duntuilm; K.; Leuchars; Nairn; Noup Head		20h.-21h.; Sumburgh; Treen House
5	Treen House		21h.23h.30m.; Rudh Re 1h.30m.-2h.30m.	24	Copinsay; Kettins; McArthur's Head
11	Treen House		(16th) Wick		18h.-20h.; Rothesay
12	Nairn; Wick	16	Nairn	26	Craibstone; E.
13	Edinburgh; Nairn; Stour Head 21h.-4h.(14th);	18	A.; Abbotsinch; B.; Barnsness, bright	31	A.; Cape Wrath 20h.-7h.(1st November);
	Treen House; Wick		display 20h.30m.-21h.; Buddonness;		Fort Augustus; Fortrose; Nairn;
14	Cape Wrath; Noup Head 1h.-4h.(15th)		Chickens Rock; Copinsay; Devaar 21h.-1h.		Noup Head 21h.-24h.; Rona 19h.-24h.;
15	Wick		(19th); Dhuheartach; Dunfermline;		Rudh Re 22h.-6h.(1st November);
18	Wick		Duntuilm; Edinburgh; Eshaness, brilliant		Treen House
19	McArthur's Head 21h.; Nairn; Treen House; Wick		display 21h. to after 24h.; Fair Isle,		
22	Wick		North, vivid display; Fort Augustus;		
27	Abbotsinch		Fortrose; Greenock; Holburn Head		NOVEMBER
28	Abbotsinch; B.; Treen House; Wick		21h.-3h.(19th); Hoy High, fine display		
29	Abbotsinch; A.; B.; Buddonness 22h.; E.;		21h.30m.-24h.; Hyskier 22h.-3h.(19th);	1	Leuchars; Stornoway
	G.C.; Kettins; Kilmarnock; McArthur's Head		Kettins; K.; Marchmont; McArthur's Head,	6	Duntuilm; Kettins
	0h.30m.(30th); Nairn; Sumburgh Head		bright display to west and east,	12	G.C.
	21h.-5h.(30th); Tarbatness 22h.-2h.(30th);		19h.45m.-6h.30m.(19th); Monach	16	Duntuilm
	Wick		21h.-sunrise; Nairn; Neist Point	17	E.; Nairn
30	Arbroath; Butt of Lewis; Cape Wrath		19h.-23h.45m.; 2h.-4h.30m.(19th);	18	Duntuilm; E.; Paisley; Rudh Re 19h.30m.-3h.30m.(19th);
	21h.-4h.(31st); Copinsay; Duntuilm;		North Berwick; North Unst; widespread and		Treen House; Ushenish 18h.-19h.30m.
	G.C.; Nairn; Neist Point 21h.-4h.30m.		vivid, 21h. onwards; Noup Head, vivid	19	Duntuilm; Nairn
	(31st); North Unst; Noup Head 23h.-5h.		display 22h.-3h.30m.(19th); Paisley;	20	Nairn; Wick
	(31st); Rona 21h., 24h., 3h., (31st);		Rhinns of Islay, brilliant display from	21	Nairn; Wick
	Rudh Re 20h.-4h.(31st); St. Abbs Head;		west to north-east 21h.-24h.; Rona	22	Wick
	Stour Head 21h.-3h.30m.(31st);		19h.-4h.(19th); Rothesay; Rudh Re	23	Abbotsinch
	Sumburgh Head 21h.-5h.(31st); Wick		21h.-6h.(19th); St. Abbs Head; Stour Head	24	Wick
31	Butt of Lewis; Cape Wrath; North Unst;		20h.; Sumburgh Head; Tiumpan Head vivid	27	A.
	Ushenish 24h.-3h.30m.(1st April)		display 20h.30m. to daylight; Treen House;	28	A.; B.; Copinsay; E.; Hoy High
			Whalsay 21h.-24h.; Wick		19h.-20h.30m.; Kettins; Leuchars;
		19	Abbotsinch; B.; Cape Wrath 20h.30m.-4h.30m.		McArthur's Head 21h.; Nairn; Strathy;
			(20th); Dunfermline; Edinburgh; E.;		Treen House; Wick
	APRIL		Fortrose; Fair Isle, South, brilliant		
			display 2h.-5h.(20th); Greenock; Hyskier;		DECEMBER
7	B.		Kettins; McArthur's Head, to north and		
8	B. Noup Head 0h.15m.-2h.(9th)		east, 20h.; Nairn; North Unst, widespread	11	Ailsa Craig 21h.15m.-21h.30m.
23	A.		and vivid, 20h.; Paisley; Sumburgh Head	14	A.; G.C.; K.; St. Abbs Head; Wick
24	Kettins; Treen House		0h.-6h.(20th); West Linton	16	Wick
		20	K.; Lismore, brilliant display in west and		

For brevity, stations which figure frequently in the above table are represented by their initials, namely A - Aberdeen, B - Baltasound, D - Deerness, E - Eskdalemuir, G.C. - Gordon Castle, K - Kirkwall.

ABERDEEN

ABERDEEN OBSERVATORY

Latitude	57°10′ N.
Longitude	2°06′ W.
G.M.T. of Local Mean Noon	12h. 8m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	26·0	..
Thermometer bulbs, north-wall screen	..	12·5
Rain-gauge site	24·1	..
Beckley rain-gauge rim	..	0·6
Sunshine recorder	..	20·7
Pressure-tube anemograph	37	13
Robinson cup anemograph	36	23

INTRODUCTION

A description of the site and instruments is given in the *Observatories' Year Book* for 1938, and no noteworthy changes have occurred.

REVIEW OF THE METEOROLOGICAL RESULTS

The mean temperature for the year was 280·8°A. slightly below the normal. The extremes recorded were 296·1°A. on June 16 and 264·0°A. on January 18. The lowest reading of the grass minimum thermometer was 258·0°A. on January 3.

The total rainfall for the year was 819 mm.; 71 mm. more than the normal.

The sunshine total 1,147 hr. was considerably less than normal.

The highest wind speed recorded in gusts was 29 m./sec. on February 5 and November 11.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. Average values of the various coefficients for the period 1871-1926 computed by Dr. A. Crichton Mitchell* are given for comparison. Dr. Mitchell gave the phase angles in local apparent time and in volumes of the *Observatories' Year Book* earlier than 1935 they were so quoted; the angles have now been converted to local mean time.

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*MITCHELL A. CRICHTON; Diurnal variation of pressure and temperature at Aberdeen 1871-1926. *Quart. J.R. met. Soc., London*, 55, 1929, p. 197.

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ABERDEEN, LONGITUDE 2°06′W.

Values of c_n, α_n in the series $\sum c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.22	0.09	217	169	0.28	0.23	137	146	0.13	0.13	356	348	0.05	0.05	244	211
February	0.44	0.16	142	173	0.25	0.27	116	143	0.12	0.10	338	346	0.05	0.03	71	84
March	0.29	0.16	224	156	0.29	0.29	141	147	0.05	0.05	17	330	0.05	0.03	28	27
April	0.19	0.15	177	155	0.26	0.28	142	151	0.00	0.02	..	188	0.06	0.04	325	359
May	0.20	0.10	118	136	0.24	0.24	132	145	0.05	0.06	152	166	0.03	0.02	329	333
June	0.11	0.06	39	104	0.24	0.22	139	141	0.03	0.07	183	155	0.02	0.01	154	331
July	0.19	0.09	101	135	0.21	0.21	139	142	0.05	0.07	150	155	0.03	0.01	267	339
August	0.23	0.11	86	161	0.20	0.23	140	144	0.03	0.04	120	165	0.04	0.03	319	333
September	0.19	0.12	179	147	0.34	0.29	148	151	0.00	0.03	..	346	0.04	0.05	354	345
October	0.19	0.15	187	187	0.24	0.27	162	156	0.09	0.07	10	0	0.05	0.03	27	34
November	0.32	0.13	210	201	0.27	0.23	155	159	0.10	0.10	337	4	0.04	0.01	164	186
December	0.08	0.16	7	169	0.11	0.21	159	147	0.08	0.12	348	357	0.04	0.05	222	205
Arithmetic mean	0.22				0.24				0.06				0.04			
Year	0.13	0.12	165	162	0.24	0.25	142	148	0.03	0.03	359	359	0.01	0.01	334	338
Winter	0.18	0.13	181	178	0.22	0.23	140	149	0.11	0.11	345	353	0.02	0.03	188	194
Equinox	0.20	0.14	195	162	0.28	0.28	148	151	0.03	0.03	13	345	0.04	0.04	3	6
Summer	0.17	0.09	93	139	0.22	0.22	138	143	0.04	0.06	152	159	0.02	0.02	301	334

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005.61 is printed 05.61

61 ABERDEEN: h_b(height of barometer cistern above M.S.L.) = 26.0 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	14.9	02.2	08.4	00.1	96.8	98.0	90.0	*83.5*	87.0	01.8	00.5	01.3	22.4	18.3	19.9	25.0	22.3	23.6
2	31.3	14.9	24.0	11.6	98.6	03.2	89.1	84.1	*86.2*	00.6	98.3	99.7	*27.4*	22.2	*25.6*	26.3	25.0	25.6
3	36.3	31.3	34.4	23.4	11.6	16.5	91.6	88.9	90.4	99.9	96.6	*97.7*	27.2	23.5	25.5	*26.4*	24.7	*25.8*
4	35.8	29.4	33.4	*25.1*	16.0	*22.3*	94.8	90.8	92.8	13.1	99.9	06.5	23.9	22.9	23.4	24.7	19.4	21.8
5	29.5	24.0	26.6	16.0	91.0	02.1	94.6	91.0	92.3	22.6	13.0	18.0	23.1	20.3	21.2	19.4	15.1	17.4
6	25.2	22.5	23.6	99.9	90.8	96.1	99.5	91.0	94.5	28.6	22.6	26.0	21.4	20.0	20.8	15.4	09.8	12.2
7	29.8	25.0	27.2	96.6	80.8	86.9	09.9	99.5	04.6	*32.6*	28.4	*31.0*	22.3	20.8	21.6	09.8	07.7	08.4
8	36.7	29.8	33.4	94.1	86.7	90.3	19.4	09.9	14.9	32.3	29.1	30.5	22.1	20.8	21.4	08.0	04.4	06.3
9	*37.9*	34.5	*36.4*	97.1	90.2	94.8	19.6	17.0	18.3	31.5	28.2	30.3	20.8	17.9	18.9	05.6	02.7	*03.7*
10	34.5	27.7	30.3	07.7	94.0	98.9	20.2	15.6	18.2	31.1	19.5	26.7	21.5	17.7	19.5	12.3	05.5	09.0
11	28.8	26.3	27.6	09.5	02.4	07.1	21.9	19.2	20.5	19.5	11.3	13.1	21.2	18.7	20.0	14.2	12.0	13.0
12	26.3	16.1	21.3	02.7	96.6	98.7	23.4	21.6	22.6	11.5	06.8	08.5	19.2	14.7	16.8	14.2	09.7	11.2
13	16.1	02.3	08.5	96.8	94.5	95.6	22.7	21.0	21.5	08.2	97.2	02.3	18.2	13.6	15.3	13.4	11.2	12.5
14	06.2	02.0	04.2	94.5	83.6	88.6	24.0	21.6	22.8	02.6	95.3	97.9	18.0	16.4	17.4	11.4	00.9	05.5
15	04.6	01.8	03.3	87.0	82.5	84.0	27.0	23.9	25.8	05.8	02.4	04.6	16.5	10.4	13.4	17.4	*00.7*	08.6
16	01.8	96.2	98.3	95.7	86.5	92.6	26.8	25.1	25.9	03.8	96.4	00.2	10.5	05.5	06.9	19.0	13.7	16.4
17	01.5	96.0	99.1	95.9	92.1	94.6	*27.9*	26.2	*27.2*	03.1	*95.2*	98.8	07.7	00.6	03.4	15.9	13.1	14.7
18	02.0	97.8	00.3	93.0	90.8	91.8	26.7	22.4	24.0	06.5	03.1	05.5	03.1	00.2	01.1	19.1	14.4	15.9
19	02.8	96.4	99.5	92.9	89.0	91.1	27.6	24.2	26.6	04.7	01.2	02.8	11.2	03.0	06.5	20.5	18.9	19.5
20	02.2	91.1	97.1	89.0	87.1	87.8	26.7	07.3	19.2	08.1	01.6	03.7	15.5	11.2	14.2	20.4	18.9	19.5
21	91.1	85.9	88.9	93.8	87.9	90.5	14.0	03.5	09.2	16.5	08.1	13.0	14.2	02.9	07.1	19.3	11.1	16.0
22	85.9	*83.2*	*83.9*	93.7	91.2	92.3	13.7	07.9	10.3	26.1	16.4	20.3	03.0	91.9	98.3	12.2	09.1	10.5
23	94.9	85.1	90.3	93.4	91.6	92.5	14.3	08.2	10.7	30.5	26.1	28.4	91.9	84.4	87.6	14.3	06.2	09.6
24	03.6	94.9	99.0	05.6	91.8	98.8	14.1	06.3	11.0	30.7	27.1	29.5	92.1	*82.6*	*87.4*	15.1	10.8	13.5
25	12.4	03.6	07.7	07.0	04.9	06.2	08.3	04.2	06.4	27.1	20.7	24.0	95.9	91.3	92.9	11.0	08.8	10.2
26	20.6	12.4	17.1	07.2	01.1	05.2	04.4	96.8	01.4	20.7	16.9	18.5	96.4	93.5	95.3	17.1	10.7	13.0
27	20.3	16.5	18.4	01.1	80.5	87.0	01.1	97.7	99.8	16.9	11.5	13.8	07.8	95.4	00.1	20.2	16.8	18.5
28	16.5	15.0	15.7	85.0	*73.1*	*80.9*	07.2	00.8	03.9	16.0	11.2	13.2	13.1	07.8	11.7	23.4	19.7	21.6
29	16.0	14.2	15.3				08.9	06.5	07.8	20.2	16.0	18.7	12.2	08.9	10.0	23.4	21.1	22.5
30	14.2	07.3	10.6				06.5	01.8	03.4	20.0	17.8	18.8	16.4	11.0	13.3	21.1	15.2	17.6
31	07.4	00.1	03.8				02.3	00.5	01.5				22.5	16.4	19.7			
Mean	15.71	09.21	12.50	00.57	92.27	96.24	12.20	07.03	09.70	16.42	10.61	13.43	14.15	09.19	11.48	17.18	12.65	14.79

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*21.5*	18.1	*20.0*	21.0	17.3	19.9	22.0	14.2	17.7	18.3	13.4	15.7	27.5	22.7	25.5	28.6	20.7	24.5
2	19.1	13.6	15.6	20.3	14.8	16.6	22.9	13.8	18.4	22.4	17.4	19.0	27.8	26.3	27.0	*32.3*	28.6	*30.9*
3	13.6	07.8	10.0	14.9	05.4	09.6	22.8	17.7	20.0	25.9	22.4	24.9	26.8	24.9	25.8	32.2	25.0	28.1
4	15.1	11.9	13.0	05.4	89.0	95.2	22.9	17.2	20.4	27.8	25.3	26.8	25.0	21.2	23.1	30.1	21.1	27.1
5	16.2	09.5	14.2	00.1	88.2	92.0	22.0	15.5	18.5	28.2	26.6	27.3	21.4	02.4	14.2	21.1	11.1	16.9
6	09.8	07.4	08.5	05.4	00.1	02.8	23.1	15.1	18.8	26.8	20.4	23.0	02.4	96.3	99.2	11.1	81.4	90.8
7	11.0	09.1	10.2	06.6	05.1	06.0	27.6	23.0	25.4	22.0	20.4	21.4	12.1	01.9	07.1	89.0	*81.1*	*83.6*
8	14.3	09.5	11.9	07.6	03.6	04.8	27.7	23.2	25.9	21.4	15.4	18.0	15.1	12.1	13.8	95.2	88.9	92.1
9	15.1	12.0	13.7	09.3	01.1	07.0	23.2	18.7	21.2	16.2	07.5	13.7	12.2	96.0	03.2	95.5	88.9	91.3
10	12.0	07.1	09.6	01.1	98.8	00.2	18.7	10.2	13.8	07.5	98.1	01.1	96.0	87.3	91.4	95.4	86.1	92.5
11	08.8	07.1	08.0	98.8	94.5	95.9	17.0	09.0	13.1	24.4	02.4	14.8	97.1	*85.3*	90.9	96.9	85.8	92.4
12	08.4	06.0	07.0	01.6	95.8	98.5	19.9	16.7	18.0	26.3	22.8	24.9	02.2	94.2	97.1	92.0	83.4	85.6
13	10.2	07.6	08.8	01.2	*79.6*	89.1	20.8	13.0	18.7	22.8	07.6	16.0	08.5	02.2	06.9	01.1	89.3	96.7
14	09.5	03.9	06.9	01.4	88.9	97.7	23.9	11.2	17.3	07.7	01.5	04.5	18.9	07.0	13.2	96.2	85.7	91.4
15	03.9	99.4	01.8	00.9	94.2	98.5	27.0	23.9	26.1	09.5	96.1	06.4	19.8	09.1	17.1	96.8	90.5	92.5
16	09.4	*97.8*	*01.1*	94.2	83.5	*87.0*	28.4	26.6	27.5	01.5	88.0	95.2	09.1	90.7	99.7	05.9	96.8	00.5
17	14.0	09.4	12.5	93.7	89.0	92.2	29.8	27.7	28.7	01.5	86.7	94.1	97.0	86.7	*90.9*	22.7	05.9	17.0
18	13.8	06.5	09.0	02.1	93.4	97.3	*30.9*	29.6	*30.2*	98.1	*80.9*	*87.8*	09.5	97.0	04.1	23.1	19.0	21.9
19	08.1	06.6	07.4	04.0	01.8	02.8	30.3	28.4	29.4	01.9	87.3	97.0	09.8	08.5	09.2	30.5	18.5	25.2
20	08.3	06.7	07.4	02.9	00.6	01.4	28.4	25.5	26.7	12.4	86.2	02.4	08.5	01.6	05.0	30.1	20.4	25.7
21	07.8	02.7	05.8	03.0	01.7	02.5	27.3	25.7	26.7	25.1	12.4	18.9	05.3	96.7	00.4	20.4	14.4	17.0
22	09.0	07.8	08.4	05.0	01.2	02.8	26.6	20.6	23.2	30.9	22.3	25.8	05.7	99.4	03.1	24.3	16.3	19.8
23	11.5	08.4	10.2	06.5	05.0	05.9	21.0	19.6	20.4	33.4	30.9	32.4	02.7	99.2	01.4	24.3	13.1	17.5
24	11.5	09.7	10.8	10.6	06.3	08.9	19.6	14.4	16.6	*34.9*	33.3	*34.2*	03.5	95.8	01.1	18.0	09.2	13.1
25	09.8	07.8	08.7	10.1	96.1	04.0	14.4	12.7	13.4	34.2	25.6	29.4	15.4	93.0	07.0	28.3	17.6	23.6
26	10.7	06.6	08.2	98.3	94.2	95.6	12.8	08.5	10.5	29.3	25.7	27.7	14.4	98.8	05.2	17.6	15.9	21.2
27	11.6	09.7	10.8	02.6	93.6	00.1	12.5	10.1	11.2	25.7	01.3	11.5	05.6	98.2	00.0	23.2	17.5	21.1
28	09.7	05.1	06.4	93.6	89.9	91.2	10.2	03.8	06.7	12.7	01.7	08.5	26.2	05.6	17.3	24.2	22.7	23.4
29	05.5	02.9	03.8	00.3	92.1	95.4	05.7	*00.5*	*03.4*	19.2	07.8	14.5	*28.8*	26.2	*27.9*	28.9	23.7	26.7
30	09.0	03.2	05.4	16.3	00.3	07.9	13.4	05.5	08.3	18.8	09.2	12.1	27.9	24.0	26.4	28.8	27.4	28.0
31	17.3	08.8	12.0	*22.7*	16.3	*20.0*				22.7	10.5	16.5				27.5	23.6	25.9
Mean	11.47	07.41	09.27	05.21	98.11	01.56	21.76	16.72	19.21	19.66	09.91	15.01	12.74	03.68	08.47	15.85	07.41	11.75
									Annual	13.65	07.10	10.36						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

62 ABERDEEN: h_b = 26 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	12·54	12·48	12·39	12·25	12·13	*11·94*	11·98	12·13	12·50	12·73	12·94	*13·01*	12·84	12·56	12·57	12·42	12·51	12·48	12·56	12·61	12·66	12·67	12·64	12·57	12·47	12·50
Feb.	*97·03*	96·90	96·71	96·42	96·06	95·90	*95·74*	95·75	95·86	95·94	96·05	96·32	96·31	96·31	96·16	96·01	95·97	96·01	96·38	96·44	96·46	96·48	96·46	96·44	96·44	96·23
Mar.	09·45	09·33	09·18	08·99	*08·87*	08·92	09·10	09·38	09·64	09·81	10·00	10·09	10·10	10·04	09·93	09·83	09·76	09·81	09·93	10·06	10·07	*10·11*	10·05	10·04	10·04	09·70
Apr.	13·30	13·22	13·10	12·94	12·79	*12·77*	12·91	13·11	13·28	13·43	13·52	13·56	13·54	13·54	13·52	13·46	13·43	13·45	13·54	13·70	13·97	*14·04*	13·99	13·96	13·87	13·43
May	11·81	11·68	11·48	11·35	11·18	*11·15*	11·22	11·30	11·38	11·40	11·47	11·45	11·44	11·40	11·43	11·37	11·29	11·24	11·37	11·53	11·71	11·91	11·95	*11·98*	11·93	11·48
June	*15·09*	14·99	14·87	14·73	14·69	14·80	14·79	14·81	14·90	14·99	15·01	14·94	14·88	14·78	14·68	14·43	14·45	*14·43*	14·51	14·59	14·68	14·95	15·01	15·02	14·94	14·79
July	09·61	09·48	09·34	09·23	09·12	09·09	09·09	09·19	09·25	09·27	09·25	09·24	09·17	09·12	09·11	09·09	09·05	*09·00*	09·07	09·24	09·38	09·61	09·70	*09·71*	09·59	09·27
Aug.	01·81	01·78	01·73	01·55	01·38	01·35	01·43	01·51	01·53	01·58	01·54	01·51	01·42	01·39	01·33	01·33	01·30	*01·29*	01·38	01·58	01·76	01·94	02·01	*02·03*	01·96	01·56
Sept.	*19·52*	19·35	19·18	18·91	18·79	*18·78*	18·87	19·11	19·24	19·38	19·44	19·44	19·43	19·28	19·15	19·09	18·96	18·98	19·10	19·31	19·50	*19·52*	19·46	19·46	19·23	19·21
Oct.	14·93	14·88	14·78	14·56	14·47	*14·46*	14·53	14·83	15·01	15·10	15·19	15·19	15·11	15·05	14·93	14·91	14·94	15·07	15·35	*15·42*	15·39	15·38	15·36	15·29	15·23	15·01
Nov.	08·44	08·20	08·08	08·01	07·95	*07·91*	07·98	08·10	08·39	08·55	*08·91*	08·89	08·81	08·68	08·46	08·43	08·49	08·65	08·74	08·80	08·80	08·81	08·67	08·60	08·48	08·47
Dec.	11·73	11·73	11·81	11·85	11·74	11·67	11·70	11·72	11·86	11·94	11·94	*12·01*	11·81	11·61	*11·53*	11·53	11·60	11·65	11·66	11·69	11·75	11·80	11·77	11·81	11·72	11·75
Annual	10·51	10·40	10·29	10·14	10·01	*09·97*	10·02	10·16	10·31	10·42	10·51	10·54	10·48	10·37	10·30	10·23	10·23	10·26	10·37	10·49	10·59	*10·68*	10·66	10·65	10·57	10·36

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

63 ABERDEEN: h_b = 26 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	15·84	15·78	15·69	15·55	15·42	*15·23*	15·28	15·43	15·80	16·02	16·23	*16·30*	16·12	15·84	15·86	15·70	15·80	15·77	15·84	15·90	15·96	15·97	15·93	15·86	15·77	15·80
Feb.	*00·25*	00·13	99·94	99·65	99·29	99·13	*98·96*	98·98	99·08	99·16	99·27	99·53	99·53	99·37	99·21	99·18	99·22	99·33	99·60	99·66	99·69	99·70	99·68	99·66	99·66	99·45
Mar.	12·72	12·59	12·44	12·25	*12·13*	12·18	12·37	12·65	12·90	13·07	13·25	13·33	13·34	13·27	13·17	13·06	13·00	13·05	13·17	13·32	13·33	*13·37*	13·31	13·30	13·31	12·95
Apr.	16·55	16·47	16·36	16·20	16·04	*16·02*	16·17	16·36	16·52	16·68	16·76	16·80	16·77	16·77	16·75	16·69	16·66	16·69	16·77	16·94	17·21	*17·29*	17·24	17·21	17·12	16·68
May	15·03	14·91	14·71	14·58	14·42	*14·38*	14·44	14·52	14·59	14·60	14·66	14·64	14·63	14·59	14·62	14·57	14·48	14·44	14·57	14·74	14·93	15·13	15·17	*15·20*	15·15	14·69
June	*18·28*	18·18	18·06	17·93	17·89	17·99	17·98	17·99	18·07	18·16	18·18	18·10	18·03	17·93	17·82	17·58	17·60	*17·57*	17·66	17·74	17·84	18·13	18·19	18·20	18·13	17·96
July	12·75	12·62	12·49	12·37	12·27	12·23	12·23	12·32	12·38	12·39	12·37	12·35	12·28	12·22	12·22	12·20	12·16	*12·11*	12·18	12·36	12·51	12·74	12·84	*12·85*	12·73	12·39
Aug.	04·95	04·91	04·87	04·69	04·52	04·49	04·57	04·64	04·64	04·69	04·64	04·61	04·51	04·48	04·43	04·43	04·40	*04·39*	04·49	04·70	04·89	05·07	05·14	*05·16*	05·10	04·68
Sept.	*22·71*	22·54	22·37	22·10	21·98	*21·96*	22·06	22·29	22·42	22·55	22·60	22·60	22·59	22·44	22·30	22·24	22·12	22·14	22·27	22·48	22·68	22·70	22·65	22·65	22·42	22·39
Oct.	18·14	18·09	18·00	17·77	17·69	*17·68*	17·75	18·05	18·23	18·31	18·39	18·39	18·30	18·23	18·12	18·10	18·13	18·27	18·55	*18·62*	18·61	18·59	18·57	18·50	18·44	18·22
Nov.	11·66	11·41	11·29	11·23	11·16	*11·13*	11·19	11·31	11·61	11·76	*12·12*	12·09	12·02	11·88	11·66	11·64	11·69	11·86	11·95	12·01	12·01	12·02	11·88	11·81	11·70	11·68
Dec.	14·97	14·96	15·04	15·09	14·98	14·91	14·94	14·96	15·10	15·18	15·17	*15·24*	15·03	14·83	*14·75*	14·76	14·83	14·88	14·90	14·93	14·98	15·04	15·01	15·05	14·96	14·98
Annual	13·72	13·62	13·51	13·35	13·22	*13·19*	13·24	13·37	13·52	13·62	13·71	13·74	13·67	13·56	13·48	13·42	13·42	13·45	13·57	13·69	13·79	*13·89*	13·88	13·86	13·78	13·56

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

64 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	73·73	73·71	73·68	73·67	73·61	*73·59*	73·61	73·67	73·67	73·90	74·06	74·16	74·33	74·51	*74·64*	74·57	74·44	74·38	74·38	74·15	74·10	74·07	74·06	73·94	73·96	74·03
Feb.	75·22	75·14	74·93	74·88	74·82	*74·78*	74·84	74·87	74·98	75·10	75·58	76·00	76·35	76·58	*76·65*	76·61	76·48	76·08	75·78	75·55	75·40	75·46	75·36	75·21	75·21	75·53
Mar.	75·52	75·57	75·50	75·30	75·23	75·24	74·94	*74·94*	75·37	76·06	76·90	77·45	77·76	77·84	77·89	*77·91*	77·68	77·37	76·89	76·48	76·14	76·02	75·82	75·71	75·55	76·31
Apr.	77·41	77·38	77·23	77·09	*76·87*	76·91	77·12	77·50	78·08	78·40	78·84	79·16	79·26	79·49	*79·51*	79·49	79·44	79·20	78·91	78·59	78·19	77·95	77·72	77·60	77·45	78·22
May	79·32	79·07	78·92	78·79	*78·66*	78·95	79·60	80·39	81·10	81·73	81·99	82·44	82·56	*82·80*	82·25	81·92	81·81	81·59	81·22	80·90	80·27	80·05	79·78	79·54	79·36	80·65
June	83·69	83·42	83·13	*82·83*	82·89	83·18	83·80	84·51	84·98	85·35	85·62	86·19	86·65	86·77	87·18	87·21	87·15	*87·35*	86·64	86·07	85·57	84·89	84·34	84·14	83·97	85·15
July	86·20	85·97	85·75	85·52	*85·32*	85·56	86·35	87·08	87·76	88·25	88·62	88·95	89·36	*89·62*	89·60	89·49	89·07	89·12	88·53	87·91	87·55	86·81	86·45	86·24	86·13	87·54
Aug.	84·62	84·39	84·14	83·96	*83·79*	83·82	84·15	85·04	85·95	86·70	87·35	87·81	88·11	*88·16*	88·11	87·94	87·64	87·27	86·84	86·31	85·79	85·42	85·09	84·87	84·59	85·97
Sept.	84·97	84·87	84·80	84·67	*84·57*	*84·57*	84·60	85·01	85·75	86·46	87·00	87·24	87·57	*87·76*	87·60	87·58	87·40	87·14	86·71	86·14	85·75	85·48	85·22	85·00	84·86	85·99
Oct.	81·33	81·24	81·10	81·01	80·89	80·82	*80·66*	80·73	80·99	81·69	82·50	82·95	83·45	83·60	*83·68*	83·56	83·23	82·75	82·13	81·85	81·58	81·33	81·17	81·25	81·27	81·89
Nov.	79·39	79·38	79·41	79·33	*79·25*	79·36	79·54	79·54	79·55	79·70	79·91	80·19	80·31	*80·48*	80·45	80·40	80·11	79·93	79·80	79·92	79·66	79·68	79·68	79·47	79·39	79·77
Dec.	78·46	78·70	78·64	78·50	78·43	78·19	78·20	78·17	*78·16*	78·23	78·58	78·94	79·39	*79·50*	79·48	79·26	78·80	78·66	78·52	78·37	78·20	78·25	78·19	78·28	78·30	78·58
Annual	80·01	79·93	79·79	79·65	*79·55*	79·60	79·81	80·15	80·56	81·00	81·44	81·82	82·13	*82·29*	82·28	82·19	81·96	81·77	81·39	81·05	80·71	80·47	80·26	80·13	80·03	80·83

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

TEMPERATURE

Maximum, Minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275.0° is printed 75.0°. Add 0.16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273.16$

65 ABERDEEN: North-wall screen on tower: h_t (height of thermometer bulb above ground) = 12.5 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	75.2	69.2	72.4	76.3	73.8	74.8	79.1	74.5	76.6	77.3	75.0	76.5	83.2	75.9	79.2	85.1	78.2	81.5
2	74.0	64.6	70.6	74.9	72.3	73.7	80.2	74.8	76.8	76.9	75.1	76.0	80.4	76.7	78.3	85.1	80.0	81.9
3	70.6	*64.0*	*67.4*	76.6	71.3	73.6	80.2	74.0	77.1	77.0	75.7	76.4	82.9	76.1	79.9	82.4	79.7	81.1
4	71.3	69.1	70.1	75.3	70.7	73.0	79.2	73.4	75.9	76.6	74.2	75.8	82.5	77.5	79.9	82.4	78.2	*80.1*
5	*71.6*	*69.2*	*70.3*	*75.3*	*72.9*	*74.1*	*79.1*	*71.0*	*75.5*	77.7	72.7	*75.5*	*82.2*	*77.0*	79.7	*82.5*	*78.4*	*80.2*
6	72.3	64.8	69.9	78.2	74.1	75.8	78.0	74.3	75.7	78.0	72.8	*75.4*	80.2	76.2	78.4	84.0	79.8	81.1
7	77.5	67.1	73.7	*81.2*	74.6	78.0	77.6	74.1	75.8	78.3	74.4	76.4	80.1	76.0	78.2	83.5	79.2	81.4
8	77.4	75.0	76.5	80.6	76.9	78.8	78.0	76.7	77.3	77.2	75.1	76.1	80.0	76.9	77.9	82.3	80.6	81.5
9	76.4	74.4	75.4	81.0	76.8	*78.9*	79.9	76.9	77.9	79.0	75.1	77.0	81.3	77.6	79.1	84.2	80.8	82.1
10	79.4	74.5	76.7	80.1	75.9	77.5	78.7	75.7	77.1	81.0	75.1	78.3	82.8	78.3	80.1	85.2	78.1	82.3
11	*80.0*	77.4	*78.8*	79.3	74.2	76.6	78.7	75.8	77.0	86.0	78.0	81.9	86.5	77.4	81.5	84.7	*77.7*	81.4
12	79.1	77.2	78.2	78.4	76.7	77.9	77.3	75.4	76.4	87.1	80.2	*84.2*	*87.6*	78.8	83.9	85.7	*77.7*	81.5
13	*80.0*	75.7	78.0	77.7	75.4	77.0	78.7	75.2	76.8	*88.0*	80.3	83.5	86.0	76.9	81.2	88.9	79.9	83.9
14	77.6	71.8	74.6	78.1	75.4	77.1	80.1	74.2	77.4	84.2	76.3	80.4	79.7	73.5	76.8	94.5	82.7	88.0
15	73.2	69.4	71.7	78.8	76.8	78.0	79.9	72.1	75.5	81.5	75.5	78.8	79.9	*73.2*	*75.2*	89.9	84.9	87.5
16	71.4	68.4	69.9	78.9	74.3	76.7	79.9	71.2	74.8	84.7	77.1	81.1	83.1	73.3	78.7	*96.1*	84.1	89.0
17	72.6	68.4	70.8	76.2	73.7	75.3	78.7	74.5	76.9	83.1	78.0	80.8	85.5	76.0	81.7	94.4	86.1	89.8
18	74.6	*64.0*	69.2	75.4	72.2	73.9	79.3	76.2	77.5	80.7	78.0	79.2	86.0	80.3	83.3	93.0	85.7	87.8
19	74.6	71.7	73.8	73.8	72.1	73.1	81.5	75.9	78.7	79.1	78.0	78.6	85.9	79.7	82.4	88.2	83.2	86.0
20	75.7	68.4	73.2	74.2	71.8	73.2	*83.3*	75.4	*79.6*	79.6	77.0	78.4	85.1	80.1	82.0	90.3	80.5	86.1
21	75.9	74.4	75.4	75.4	73.0	74.0	83.1	76.3	79.3	79.1	76.5	77.9	85.2	80.2	82.0	87.1	81.2	84.1
22	78.4	74.1	76.1	75.2	*69.8*	*72.6*	78.6	74.4	76.6	79.4	77.2	78.2	87.2	80.8	*83.9*	92.1	85.6	88.7
23	78.5	76.1	77.8	74.5	71.4	73.1	79.0	72.8	75.6	78.7	73.2	77.0	83.1	80.7	81.6	94.4	86.5	*89.9*
24	77.6	75.1	76.5	76.2	73.1	74.5	78.3	72.7	75.7	80.7	*71.8*	76.8	87.3	80.7	83.3	91.9	85.0	88.8
25	76.0	73.8	74.9	76.3	71.0	73.5	78.4	74.5	76.4	80.0	76.9	78.1	85.2	79.0	82.5	91.1	85.1	88.4
26	75.4	74.5	75.0	76.6	71.1	74.3	76.6	73.2	74.6	79.9	76.2	78.2	82.5	80.2	81.1	94.3	84.9	89.4
27	75.2	74.4	75.0	79.3	74.2	77.0	75.7	74.8	75.2	78.4	73.6	76.1	82.7	80.2	81.3	91.9	84.4	88.3
28	75.4	74.0	75.0	80.8	75.9	78.8	75.8	73.0	74.5	79.9	75.0	77.3	84.0	80.2	82.2	89.3	85.9	87.5
29	76.6	75.2	76.0				75.2	71.3	*73.3*	80.1	77.1	78.4	85.0	80.3	82.0	89.7	85.3	87.1
30	76.2	75.2	75.7				76.8	*69.7*	73.4	79.4	77.9	78.5	87.0	80.1	82.3	92.9	84.2	88.0
31	77.6	75.2	76.3				77.4	72.8	75.0				84.2	79.2	80.6			
Mean	75.7	71.8	74.0	77.3	73.6	75.5	78.8	74.1	76.3	80.3	76.0	78.2	83.7	78.0	80.7	88.6	82.1	85.2

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	89.5	85.0	87.2	88.0	83.5	86.0	91.4	84.6	87.5	89.5	80.7	85.2	79.9	75.0	77.4	80.6	76.1	78.5
2	94.1	85.1	89.5	*92.9*	82.3	87.7	92.4	84.1	88.8	*91.7*	84.2	*87.5*	78.9	75.2	76.9	81.9	74.5	78.6
3	90.2	84.4	86.7	92.3	85.3	*88.3*	*95.1*	85.0	89.5	87.0	84.5	85.4	81.5	74.9	78.8	81.6	75.5	78.8
4	91.0	83.0	87.2	88.1	84.3	86.2	92.7	84.6	87.2	86.7	84.2	85.6	80.7	78.2	79.7	80.2	75.7	77.8
5	89.1	81.9	86.2	88.6	82.1	84.8	87.1	85.3	86.1	86.0	85.0	85.6	83.0	75.4	79.7	80.3	76.3	78.6
6	94.0	86.0	90.2	88.7	81.1	84.9	87.3	81.2	85.5	85.9	84.6	85.5	84.0	76.3	79.6	82.0	76.0	79.4
7	91.1	87.1	89.0	87.9	81.0	84.1	86.0	*78.9*	*82.7*	86.6	79.8	83.9	78.0	73.8	75.9	76.6	74.0	75.5
8	*95.7*	87.0	*91.1*	88.2	82.3	85.1	86.6	79.3	84.0	89.7	84.7	86.8	77.1	71.9	*74.8*	78.8	75.9	77.3
9	90.5	84.4	87.9	86.3	*80.1*	*84.0*	94.1	85.6	*90.0*	86.1	82.3	83.6	81.2	*70.6*	77.8	83.7	78.7	82.0
10	91.3	83.7	87.3	91.8	84.8	87.5	90.2	84.4	87.8	84.4	81.1	82.6	81.2	79.2	80.4	83.9	81.4	82.6
11	93.9	84.8	89.0	89.7	84.6	87.2	86.8	82.0	84.7	83.6	75.7	81.0	82.8	79.8	81.3	84.4	81.2	82.7
12	95.1	86.8	90.2	90.6	83.1	86.4	88.6	82.1	85.3	83.4	73.9	78.4	82.1	78.7	80.2	83.6	79.0	81.0
13	87.1	86.0	86.6	87.0	82.1	84.4	91.7	85.4	88.3	84.7	75.1	80.4	82.1	78.7	80.1	83.5	78.4	80.7
14	86.5	85.3	85.8	89.0	83.7	85.8	88.0	82.3	85.2	86.7	81.1	83.3	81.5	78.7	80.1	82.9	76.8	79.7
15	89.0	84.7	86.4	88.7	82.0	85.6	84.6	80.4	82.8	85.9	79.5	82.9	80.4	77.5	78.9	80.3	77.4	78.9
16	94.2	85.8	88.8	86.6	82.8	84.9	88.0	79.7	84.1	85.7	79.3	83.2	81.3	75.9	78.3	80.2	76.6	78.6
17	92.4	83.1	87.9	88.1	82.2	85.4	89.8	79.6	85.6	83.2	79.5	81.3	82.5	80.6	81.7	79.1	76.3	78.1
18	89.4	83.5	86.0	90.9	83.1	87.1	88.4	85.5	86.8	82.7	78.1	80.8	81.5	79.6	80.5	78.4	75.2	76.6
19	88.8	83.2	86.1	89.5	84.9	86.8	89.0	85.2	86.6	86.0	76.8	81.6	80.8	78.7	79.5	80.0	73.4	77.8
20	89.8	83.5	86.2	89.5	82.3	86.2	87.0	82.1	85.4	85.3	79.2	83.0	81.9	79.0	80.8	80.8	74.4	78.4
21	88.2	*81.4*	*84.8*	87.2	82.2	84.8	88.6	80.9	84.7	83.3	77.4	80.2	83.3	79.4	82.0	84.1	79.5	81.6
22	89.7	82.2	85.9	88.5	82.3	85.2	85.8	84.5	85.0	82.5	76.8	79.3	83.4	79.2	81.9	82.0	76.5	79.0
23	89.1	84.8	86.6	87.6	81.3	85.1	88.1	83.6	85.6	82.1	76.5	78.8	83.3	81.5	82.6	84.9	76.5	81.7
24	90.7	85.2	87.9	90.0	82.2	86.2	86.3	85.2	85.7	81.5	74.8	78.0	*84.7*	81.3	*83.4*	*86.0*	78.5	*83.0*
25	90.3	84.7	88.1	88.2	83.0	85.3	89.2	85.2	87.2	84.5	74.7	80.5	84.1	76.9	80.1	78.6	74.8	76.2
26	91.8	86.5	88.3	90.1	83.3	86.9	88.9	86.4	87.4	80.4	77.5	78.5	83.8	77.2	81.7	75.6	73.7	74.7
27	90.4	84.8	87.3	90.7	85.2	87.0	87.9	85.8	86.7	86.3	78.1	82.5	83.5	79.9	82.7	74.3	*67.8*	*71.5*
28	93.4	85.0	88.4	90.4	85.2	87.4	87.1	85.5	86.4	81.0	74.3	78.5	80.7	75.7	78.5	77.6	68.0	73.4
29	87.5	84.5	86.3	89.7	82.5	86.0	87.2	80.8	84.4	79.7	*73.7*	*76.5*	80.4	75.4	77.8	78.4	76.1	77.2
30	90.5	84.7	87.2	89.1	84.2	86.4	86.2	80.7	82.9	80.0	75.7	78.1	80.4	79.4	80.0	80.0	77.3	78.8
31	90.4	85.4	87.6	89.7	85.0	86.4				80.7	79.1	79.9				79.5	74.1	77.5
Mean	90.8	84.6	87.5	89.1	83.0	86.0	88.7	83.2	86.0	84.6	79.0	81.9	81.7	77.5	79.8	80.8	76.0	78.6
									Annual	83.4	78.3	80.8						

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

66 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	77·1	4·5	89·0	6·2	70·7	5·6	75·5	5·9	82·6	7·8	80·4	8·9	82·2	13·3	85·7	12·8	88·1	14·6	83·2	11·8	84·4	7·1	78·4	7·1
2	87·5	4·5	78·7	5·1	74·6	6·0	85·9	6·5	84·6	7·5	74·8	8·5	83·6	15·7	82·9	13·9	77·3	13·9	78·4	13·0	89·4	7·2	87·0	7·9
3	79·7	*3·2*	75·5	4·8	78·0	6·4	90·1	7·0	70·1	7·0	78·9	8·5	83·9	13·1	80·3	*14·0*	73·0	13·7	93·6	13·5	92·0	8·5	84·2	7·8
4	69·6	3·4	80·4	4·9	85·0	6·4	88·3	6·6	66·8	6·6	*92·3*	9·3	*59·1*	*9·6*	89·3	13·6	82·7	13·4	89·8	13·1	90·7	8·9	80·1	6·9
5	78·8	3·9	84·0	5·6	76·7	5·6	75·9	5·6	66·5	6·5	88·9	9·0	70·8	10·7	80·9	11·2	91·4	13·8	91·1	13·3	84·7	8·3	80·8	7·4
6	68·4	3·3	77·9	5·8	86·3	6·4	75·1	5·5	71·5	6·4	84·0	9·1	80·0	15·7	73·0	10·2	81·9	11·9	96·9	14·1	76·7	7·5	72·4	7·0
7	91·3	5·9	78·4	6·8	85·5	6·4	70·5	5·5	73·1	6·5	86·1	9·5	88·5	*16·1*	*69·1*	*9·1*	74·1	8·9	*97·0*	12·6	85·3	6·4	72·7	5·3
8	79·1	6·2	86·5	8·0	*90·4*	7·5	67·3	5·1	77·0	6·7	89·5	9·9	65·8	13·7	78·6	11·1	79·7	10·5	93·7	*14·8*	76·1	*5·3*	*69·2*	5·7
9	75·7	5·5	67·5	6·3	81·4	7·0	66·7	5·4	77·6	7·3	80·2	9·3	72·7	12·3	75·1	9·9	77·5	15·0	80·6	10·3	*68·3*	5·9	71·7	8·2
10	83·7	6·7	74·9	6·3	81·7	6·7	71·7	6·4	77·8	7·9	64·9	7·6	83·8	13·7	80·6	13·3	81·1	13·7	89·7	10·7	78·7	8·1	78·7	9·4
11	87·5	*8·1*	78·7	6·2	88·0	7·2	84·2	9·6	77·5	8·6	66·2	7·3	78·0	14·2	81·7	13·2	78·1	10·7	65·5	7·0	91·5	10·0	78·8	*9·5*
12	80·2	7·1	87·0	7·5	81·7	6·4	77·1	*10·3*	*65·2*	8·5	62·7	*7·0*	81·3	16·0	71·2	11·0	77·1	11·0	73·9	6·6	93·6	9·5	70·1	7·5
13	80·0	7·0	75·9	6·2	81·6	6·5	73·2	9·3	71·1	7·7	64·9	8·5	94·0	14·6	90·3	12·2	79·3	13·8	88·0	9·1	90·9	9·2	77·9	8·2
14	76·8	5·3	88·9	7·3	78·8	6·6	72·6	7·5	67·2	*5·4*	74·1	12·6	*96·3*	14·2	78·7	11·6	72·0	10·2	79·7	10·0	93·1	9·4	72·4	7·1
15	86·4	4·8	*92·6*	*8·1*	78·2	5·7	77·7	7·2	81·1	5·8	63·6	10·5	95·7	14·7	80·9	11·8	*68·9*	*8·3*	73·0	8·9	71·8	6·7	75·5	7·0
16	82·6	4·0	86·0	6·9	87·8	6·1	73·8	8·0	68·1	6·2	64·3	11·7	78·9	14·2	93·4	13·0	73·7	9·7	74·1	9·2	73·8	6·6	70·3	6·4
17	86·6	4·5	79·7	5·7	87·7	7·1	81·3	8·6	73·0	8·2	62·9	12·0	64·5	10·9	84·7	12·2	78·4	11·4	79·2	8·7	*94·6*	10·6	76·6	6·7
18	89·6	4·1	84·0	5·5	79·3	6·7	88·7	8·4	70·8	8·9	71·5	12·0	90·6	13·6	73·8	11·9	83·1	13·1	80·7	8·5	87·5	9·1	77·1	6·1
19	73·4	4·7	90·0	5·5	82·4	*7·5*	88·5	8·1	83·4	9·8	70·7	10·6	68·0	10·3	78·6	12·4	85·6	13·3	80·7	9·0	83·8	8·1	82·7	7·1
20	62·4	3·9	87·4	5·4	72·6	7·1	*94·4*	8·5	79·1	9·1	74·1	11·2	76·1	11·5	79·8	12·1	88·0	12·7	*61·9*	7·6	86·1	9·1	84·7	7·6
21	67·1	4·9	89·3	5·9	64·7	6·2	89·5	7·8	86·0	9·9	91·7	12·1	80·3	11·1	90·0	12·5	87·1	12·0	70·4	7·1	90·5	10·4	74·5	8·3
22	91·2	7·0	88·7	5·3	*60·5*	4·8	86·1	7·6	81·5	10·6	81·1	14·5	77·9	11·6	84·2	12·0	81·0	11·4	73·6	7·0	89·3	10·2	73·7	6·9
23	*93·2*	8·0	88·0	5·4	71·4	5·3	*62·6*	*5·1*	*96·8*	*10·8*	77·6	*14·9*	82·7	12·9	81·0	11·4	88·2	12·9	81·6	7·5	94·0	11·3	74·7	8·4
24	86·1	6·8	80·4	5·5	69·3	5·1	69·3	5·6	74·7	9·4	66·0	11·9	78·7	13·3	85·8	13·0	89·3	13·1	80·0	7·0	91·3	*11·5*	70·7	8·7
25	81·5	5·7	*64·5*	*4·1*	63·6	5·0	71·5	6·3	78·7	9·3	71·2	12·5	84·9	14·6	*93·6*	13·4	91·7	14·9	77·1	8·0	75·9	7·7	76·3	5·9
26	62·6	4·4	69·9	4·7	88·5	6·1	76·5	6·8	95·2	10·3	61·7	11·5	89·0	15·5	77·9	12·4	91·4	15·0	76·8	7·0	82·5	9·3	87·3	6·0
27	*62·1*	4·4	91·6	7·4	89·6	6·4	82·7	6·3	94·5	10·3	*60·1*	10·5	86·4	14·1	75·9	12·1	*96·1*	*15·1*	78·1	9·3	84·9	10·2	84·7	*4·6*
28	72·0	5·1	80·7	7·4	80·9	5·5	78·8	6·6	89·3	10·4	79·0	13·1	86·6	15·2	77·6	12·7	91·6	14·1	80·2	7·2	79·9	7·2	80·1	5·0
29	80·8	6·1			81·2	5·1	81·0	7·3	88·5	10·2	82·3	13·2	89·6	13·7	81·2	12·2	85·4	11·5	67·2	*5·3*	86·7	7·5	*95·6*	7·9
30	74·0	5·5			70·7	*4·5*	87·6	7·9	83·3	9·8	82·9	14·1	78·4	12·7	81·9	12·6	79·9	9·7	91·7	8·1	72·5	7·3	77·6	7·2
31	80·9	6·3			90·1	6·4			91·4	9·5			86·0	14·3	72·6	11·2			75·3	7·5			85·5	7·2
Mean*	79·0	5·3	82·0	6·1	79·3	6·2	78·8	7·1	78·8	8·4	75·0	10·7	81·1	13·5	81·0	12·1	82·4	12·4	80·7	9·4	84·7	8·5	78·1	7·2

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

67 ABERDEEN: h_t = 12·5 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	79·3	79·4	80·3	81·3	81·1	81·6	82·3	*82·5*	81·5	79·2	76·9	76·7	*75·9*	*75·9*	77·0	78·3	77·6	76·3	76·9	78·6	79·0	79·9	79·0	79·4	78·9	79·0
Feb.	83·1	83·2	84·3	84·6	84·8	*85·8*	85·5	85·7	84·4	84·3	82·3	80·6	78·3	77·1	*77·0*	77·6	*77·0*	77·9	80·5	82·7	83·1	83·1	82·0	83·1	82·9	82·0
Mar.	82·8	82·7	83·3	84·3	84·5	84·3	*85·4*	84·7	82·5	78·6	74·9	73·9	72·6	73·2	71·8	*71·6*	73·6	76·4	78·4	79·6	80·1	80·6	81·1	82·6	83·1	79·3
Apr.	82·6	81·5	81·7	82·0	*82·8*	*82·8*	82·1	81·5	79·5	77·4	76·9	75·8	76·4	76·1	75·2	*73·0*	73·9	75·5	75·6	77·5	79·6	78·9	81·3	82·0	82·7	78·8
May	83·9	84·5	85·1	85·3	*85·7*	84·4	82·6	80·3	77·6	74·1	73·8	71·4	70·9	*68·9*	72·2	73·6	74·6	75·1	76·3	79·3	82·0	82·8	83·5	84·2	84·3	78·8
June	80·7	81·3	81·7	*82·8*	82·4	82·6	80·7	77·6	75·6	74·2	73·0	71·3	68·8	68·3	67·6	*66·7*	67·7	66·9	69·6	71·6	73·6	76·1	79·9	79·8	80·5	75·0
July	86·9	87·9	*88·2*	87·8	88·0	87·3	84·4	81·8	79·5	77·7	76·7	75·3	74·0	73·3	73·5	*73·3*	75·5	75·2	77·7	80·2	82·5	85·5	86·5	87·5	87·0	81·1
Aug.	86·6	86·4	87·2	87·1	86·6	*87·5*	87·1	84·5	79·8	75·6	72·6	*71·7*	72·4	72·6	73·2	74·8	76·9	79·0	80·3	82·0	84·7	85·3	85·2	85·1	85·9	81·0
Sept.	85·4	86·1	86·8	87·0	87·8	*88·4*	88·3	87·6	84·7	82·6	79·7	78·0	76·8	*74·8*	75·5	76·3	76·8	77·2	78·8	81·9	83·7	83·7	85·1	85·3	85·5	82·4
Oct.	82·1	82·3	82·2	82·1	83·5	82·3	84·1	*84·1*	82·3	82·2	78·9	77·9	*75·1*	76·8	75·7	76·2	77·4	78·8	81·4	81·6	82·2	82·5	83·6	82·6	81·8	80·7
Nov.	85·0	85·0	85·6	86·2	86·7	*87·0*	86·2	86·5	86·0	85·6	83·3	83·0	82·5	*80·7*	81·6	82·6	84·1	84·9	85·6	84·4	85·3	84·7	84·7	85·4	85·2	84·7
Dec.	79·9	78·3	77·6	77·2	77·3	79·4	79·2	79·3	78·7	77·8	76·3	76·5	*74·3*	75·2	74·7	75·4	77·4	78·1	80·0	79·5	80·8	80·6	*81·3*	80·2	80·3	78·1
Annual	83·2	83·2	83·6	84·0	84·3	*84·4*	84·0	83·0	81·0	79·1	77·1	76·0	74·8	*74·4*	74·6	74·9	76·0	76·8	78·4	79·9	81·4	82·0	82·8	83·1	83·2	80·1

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

68 ABERDEEN: h_t = 12·5 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·1	5·1	5·2	5·2	5·2	5·2	5·3	5·3	5·2	5·2	*5·1*	5·1	5·1	5·2	5·3	*5·4*	5·3	5·1	5·2	5·2	5·2	5·3	5·2	5·2	5·2	5·2
Feb.	5·9	5·9	5·9	5·9	*5·9*	6·0	6·0	6·0	5·9	6·0	6·1	6·1	6·1	6·1	6·1	*6·1*	6·0	5·9	6·0	6·1	6·0	6·1	5·9	6·0	5·9	6·0
Mar.	6·1	6·1	6·1	6·1	6·1	6·1	6·0	*6·0*	6·0	6·0	6·1	6·2	6·2	6·3	6·2	6·2	6·3	*6·4*	6·3	6·2	6·1	6·1	6·1	6·1	6·1	6·1
Apr.	6·9	6·9	6·8	6·7	*6·7*	6·7	6·7	6·9	7·0	7·0	7·1	7·2	7·3	*7·4*	7·3	7·1	7·1	7·2	7·0	7·1	7·0	6·9	7·0	7·0	6·9	7·0
May	8·1	7·9	7·9	7·9	*7·8*	7·9	8·1	8·3	8·4	8·4	*8·5*	8·4	8·5	8·3	8·4	8·4	8·5	8·4	8·3	8·4	8·4	8·3	8·2	8·2	8·1	8·2
June	10·5	10·1	10·1	10·1	*10·0*	10·3	10·4	10·5	10·6	10·7	10·7	10·8	10·8	10·8	*10·9*	10·8	10·9	10·9	10·9	10·8	10·7	10·6	10·7	10·6	10·5	10·6
July	13·1	13·1	13·0	12·8	*12·6*	12·7	12·9	13·1	13·4	13·5	13·6	13·6	13·8	13·9	*13·9*	13·8	13·8	13·8	13·7	13·6	13·7	13·6	13·3	13·3	13·1	13·4
Aug.	11·7	11·4	11·5	11·4	*11·2*	11·3	11·5	11·9	11·9	11·9	11·9	12·1	12·4	12·5	12·5	12·7	12·8	*12·9*	12·7	12·5	12·4	12·3	12·0	11·8	11·7	12·1
Sept.	12·0	12·0	12·0	11·9	12·0	12·1	12·1	12·3	12·5	12·8	12·7	*12·8*	12·7	12·6	12·6	12·7	12·6	12·5	12·4	12·4	12·3	12·1	12·1	12·0	*11·9*	12·3
Oct.	8·9	9·0	8·9	8·8	8·9	*8·7*	8·8	8·9	8·8	9·2	9·4	9·5	9·5	*9·8*	9·7	9·7	9·6	9·5	9·4	9·3	9·2	9·1	9·1	9·0	8·9	9·2
Nov.	8·2	*8·2*	8·2	8·2	8·2	8·3	8·4	8·4	8·4	8·4	8·3	8·4	8·4	8·4	8·4	*8·5*	8·5	8·5	8·5	8·4	8·4	8·3	8·3	8·2	8·2	8·4
Dec.	7·2	7·2	7·1	7·0	7·0	7·0	7·0	7·0	6·9	*6·9*	6·9	7·1	7·1	*7·3*	7·2	7·2	7·1	7·1	7·2	7·1	7·2	7·2	7·2	7·1	7·2	7·1
Annual	8·4	8·3	8·3	8·2	*8·2*	8·2	8·3	8·4	8·4	8·5	8·5	8·6	8·7	8·7	*8·7*	8·7	8·7	8·7	8·6	8·6	8·6	8·5	8·4	8·4	8·4	8·5

* Mean of values, 1,2,.....23, ½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

69 ABERDEEN: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 24·1 m. + 0·6 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	5·6	3·3	(15)	7·7	14·6	2	...	...	...	0·8	2·4	3	...	...	...	...	...	...
2	2·7	2·7	4	1·6	5·6	...	0·1	0·5	...	6·9	*15·7*	6	...	...	...	...	...	...
3	...	...	...	0·2	0·1	(2)	...	...	...	7·9	11·6	6	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	*9·3*	11·9	10	...	...	...	...	...	...
5	...	...	...	10·3	14·8	(2)	...	...	...	0·6	0·6	(2)	0·1	0·2	...	...	...	...
6	...	...	...	1·3	2·1	(2)	2·4	3·0	9	0·1	0·2	...	0·5	0·8	4	...	...	...
7	0·5	3·5	...	3·1	4·3	7	1·7	2·2	11	0·3	0·3	2	0·1	0·2	1	...	...	...
8	...	...	...	3·3	3·8	5	0·7	2·9	...	...	...	...	0·6	0·8	2	0·1	0·9	...
9	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·5	...	...	...	...
10	0·1	0·5	...	...	...	...	...	...	...	0·2	1·5	...	...	...	...	...	...	...
11	0·7	1·3	2	...	...	...	...	...	...	6·5	7·1	(3)	...	...	...	0·1	0·5	...
12	...	...	...	...	...	...	0·1	0·5	...	0·5	0·8	2	...	...	...	0·4	0·9	...
13	2·8	2·5	3	1·2	3·7	2	...	...	...	2·8	4·5	3	3·0	5·0	2	0·1	0·3	...
14	1·4	3·4	...	14·2	14·8	8	...	...	...	0·5	0·7	6	0·4	1·0	...	0·9	1·7	1
15	3·0	4·4	(5)	10·3	18·7	7	...	...	...	2·4	2·2	*15*	10·2	6·3	*11*	...	...	...
16	3·6	4·5	(2)	0·1	1·0	...	...	...	...	...	...	...	0·4	0·9	3	...	...	...
17	5·9	4·5	(8)	5·4	5·4	(15)	...	...	...	0·4	1·7	...	...	...	...	...	...	...
18	5·2	6·6	(4)	3·3	6·2	(5)	...	...	...	1·2	6·6	5	...	...	...	1·9	*2·8*	3
19	0·9	4·1	...	12·0	*22·0*	(7)	...	...	...	0·6	0·5	6	...	...	...	...	...	...
20	...	...	...	2·6	10·0	(4)	1·3	2·7	1	8·4	6·0	4	1·1	2·7	...	...	...	...
21	2·0	9·0	1	2·1	5·2	(1)	1·0	0·9	*40*	...	...	...	11·1	4·5	9	1·4	0·7	24
22	*14·6*	*15·0*	3	...	...	...	...	...	...	...	...	...	0·1	0·5	...	2·0	1·9	3
23	1·6	5·2	...	1·8	4·1	(1)	...	...	...	...	...	...	*15·0*	*13·3*	5	*8·9*	2·5	*75*
24	8·6	14·4	*15*	1·5	4·3	(2)	...	...	...	0·1	0·3	...	1·2	3·3	1	...	...	...
25	2·5	6·7	1	...	...	...	0·1	0·2	...	...	...	...	...	...	...	1·2	0·6	6
26	0·5	1·0	...	...	...	...	*10·0*	*13·6*	3	...	...	...	4·9	6·2	5	...	...	...
27	...	...	...	*16·4*	14·6	10	2·4	9·2	2	3·4	2·6	(7)	...	...	...	...	...	...
28	0·1	0·5	...	2·7	1·4	*15*	3·1	6·7	2	1·6	2·3	(1)	0·1	0·5	...	...	...	...
29	1·2	3·6	1				0·4	0·8	...	0·4	0·8	(1)	0·3	0·3	4	...	...	...
30	...	...	...				1·6	1·0	5	...	...	...	...	...	...	7·9	1·9	61
31	...	...	...				5·2	10·2	9				...	...	...			
Total	63·5	96·7	-	100·9	156·7	-	30·1	54·4	-	54·9	80·3	-	49·2	47·0	-	24·9	14·7	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	0·8	1·8	1	0·1	0·5	...	1·2	0·8	2	0·3	0·6	...
2	4·3	4·3	4	...	...	...	...	...	...	...	...	...	2·7	4·2	1	...	...	...
3	2·2	5·5	1	...	...	...	...	...	...	...	...	...	5·8	1·9	20	0·1	0·2	...
4	...	...	...	12·9	5·3	87	...	...	...	...	...	...	1·4	2·4	1	...	...	...
5	0·3	0·6	...	9·3	4·3	21	...	...	...	...	...	...	...	...	...	0·1	0·5	...
6	...	...	...	2·1	2·3	3	...	...	...	0·9	2·7	...	5·1	4·4	22	0·1	0·5	...
7	0·8	1·7	...	0·9	1·3	3	...	...	...	0·1	1·0	...	12·7	7·5	8	2·2	4·8	2
8	...	...	...	2·1	1·2	22	0·1	0·3	...	0·3	0·8	...	2·0	4·3	1	...	...	...
9	...	...	...	0·4	0·9	...	0·2	0·4	1	0·7	2·1	...	...	...	...	2·4	1·6	3
10	...	...	...	3·5	3·1	23	2·4	1·9	4	*62·1*	*18·5*	29	15·4	9·6	8	...	...	...
11	...	...	...	4·8	3·8	3	0·9	1·0	2	0·1	0·5	...	5·5	4·5	6	...	...	...
12	...	...	...	2·2	0·4	75	...	...	...	...	...	...	*20·7*	*16·5*	6	...	...	...
13	7·3	2·4	*79*	*26·0*	11·2	54	2·5	2·5	5	2·1	3·1	1	11·6	15·9	8	...	...	...
14	9·6	11·1	37	1·6	2·5	1	0·3	0·6	9	1·0	3·6	...	8·0	10·2	10	6·1	3·6	4
15	...	...	...	...	...	...	...	...	...	2·0	1·8	2	1·9	5·6	...	...	...	...
16	0·6	0·4	7	23·1	*11·3*	10	...	...	...	6·3	4·7	*35*	4·1	6·0	2	0·1	0·5	...
17	0·2	0·4	...	0·2	0·8	...	...	...	...	0·6	0·8	1	15·8	9·7	7	0·5	1·5	...
18	*22·7*	*13·8*	29	...	...	...	...	...	...	5·9	4·7	3	4·8	2·0	16	...	...	...
19	...	...	...	0·4	0·5	3	0·1	1·0	...	1·1	0·9	3	0·5	0·3	2	0·6	1·6	...
20	6·3	3·1	65	...	...	...	0·6	3·5	...	...	...	...	3·7	2·4	9	...	...	...
21	3·9	2·4	7	3·1	2·4	3	...	...	...	0·1	0·2	1	12·6	3·8	*34*	...	...	...
22	1·6	1·5	13	15·7	2·7	*142*	...	...	...	1·7	0·9	15	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	0·2	0·2	...	6·2	6·3	7	...	...	...
24	...	...	...	0·4	0·7	...	...	...	...	...	...	...	0·6	1·4	...	0·3	0·8	...
25	0·6	0·9	1	6·2	3·2	24	...	...	...	0·4	0·9	2	0·7	0·5	11	0·8	1·0	7
26	...	...	...	2·1	1·1	23	...	...	...	0·8	1·1	2	0·5	3·2	...	*6·9*	*6·7*	3
27	...	...	...	1·0	1·4	1	0·4	1·4	...	2·2	3·8	3	0·6	1·6	...	...	...	...
28	0·9	1·0	...	...	...	...	*5·4*	*3·8*	*13*	8·6	7·8	19	...	...	...	0·1	0·2	...
29	8·7	9·8	5	3·3	1·4	12	0·2	0·8	...	3·4	4·1	3	0·8	1·6	1	1·0	6·4	...
30	...	...	...	3·0	1·8	8	...	...	...	21·6	14·2	7	...	...	...	...	...	...
31	...	...	...	...	...	...				1·0	1·9	...				...	...	...
Total	70·0	58·9	-	122·3	63·6	-	13·9	19·0	-	123·3	80·8	-	144·9	126·6	-	21·6	30·5	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

70 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	2·1	2·3	3·0	5·0	*5·4*	2·8	5·1	3·3	2·8	1·4	0·9	0·8	0·9	2·2	4·5	2·6	1·2	1·7	3·1	2·8	1·8	3·0	2·7	2·1	63·5
Feb.	2·5	1·6	3·4	4·1	*7·6*	6·4	6·0	3·9	3·7	3·1	2·9	2·3	4·0	2·4	2·3	5·4	6·9	2·5	5·6	4·0	6·1	5·4	5·2	3·6	100·9
Mar.	1·2	1·4	1·0	1·0	0·4	1·4	0·8	1·8	1·1	0·7	0·9	1·5	0·9	1·3	1·1	*2·7*	1·9	1·5	1·1	1·1	2·2	0·8	0·1	2·2	30·1
Apr.	1·8	1·1	1·2	2·1	3·4	*4·8*	4·0	3·8	4·5	2·8	2·4	1·9	3·4	1·4	0·4	0·7	0·7	2·8	1·1	0·9	3·2	3·2	1·7	1·6	54·9
May	1·9	4·0	*4·4*	4·2	1·6	1·4	2·7	3·0	1·6	2·1	0·7	1·9	0·7	1·4	1·8	2·5	3·4	4·3	1·1	1·0	0·4	1·5	1·0	0·6	49·2
June	0·5	1·1	0·7	1·9	3·9	0·8	2·7	1·5	0·1	0·1	0·7	···	···	···	···	1·4	···	*6·0*	0·4	···	···	1·1	1·4	0·6	24·9
July	1·1	1·8	3·1	2·3	3·0	2·6	2·5	1·7	1·3	4·1	1·6	0·1	0·4	1·6	0·6	3·8	3·2	3·7	4·4	2·9	*10·6*	8·2	0·9	4·5	70·0
Aug.	0·9	2·4	3·4	2·6	3·1	6·5	6·5	4·8	3·2	3·8	4·5	4·1	4·5	11·0	8·9	9·3	12·4	*18·7*	6·5	4·1	0·2	0·3	0·5	0·1	122·3
Sept.	0·3	0·6	0·3	0·5	1·5	0·8	0·1	0·7	0·5	0·2	···	···	···	···	0·1	···	···	···	···	1·8	1·5	*2·9*	1·0	1·1	13·9
Oct.	0·6	1·4	2·1	2·6	6·5	4·6	4·6	4·4	9·1	9·8	*12·2*	6·9	7·8	8·0	7·2	3·5	5·1	5·1	4·8	5·0	4·5	4·6	1·8	1·1	123·3
Nov.	7·1	7·4	4·4	2·7	2·9	5·7	8·4	7·5	6·6	3·5	2·9	1·3	5·1	5·1	4·9	*12·3*	11·7	7·2	4·5	5·3	5·5	8·4	7·2	7·3	144·9
Dec.	0·3	···	0·5	0·8	2·4	0·7	0·1	0·5	0·2	···	···	0·2	1·0	1·7	2·9	*3·6*	3·2	1·6	0·6	0·2	0·2	0·4	0·2	0·3	21·6
Annual	*20·3*	25·1	27·5	29·8	41·7	38·5	43·5	36·9	34·7	31·6	29·7	21·0	28·7	36·1	34·7	47·8	49·7	*55·1*	33·2	29·1	36·2	39·8	23·7	25·1	819·5

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

71 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	3·7	2·6	3·6	4·6	5·5	3·2	5·4	4·2	4·4	2·7	2·2	1·4	3·4	1·2	6·1	5·0	4·5	2·9	3·8	4·6	4·8	5·0	*6·8*	5·1	96·7
Feb.	7·4	4·6	7·7	*8·9*	8·6	7·6	6·4	6·4	6·4	7·2	7·3	6·1	6·0	4·8	5·9	5·5	5·9	4·4	5·4	6·7	6·3	7·5	7·3	6·4	156·7
Mar.	2·0	2·9	2·2	*3·8*	1·6	2·8	3·7	*3·8*	2·6	2·9	3·1	2·3	1·2	2·1	1·3	2·7	2·3	1·4	1·0	1·9	2·2	1·2	1·0	2·4	54·4
Apr.	2·7	3·7	3·3	3·6	4·7	4·9	5·4	*6·0*	5·4	5·5	4·0	2·9	2·3	2·8	1·1	0·8	1·5	2·7	2·1	1·8	3·4	3·7	3·0	3·0	80·3
May	1·8	2·6	2·6	2·8	1·3	1·4	*3·7*	3·4	1·7	2·4	0·9	1·2	1·0	1·5	1·9	2·0	2·8	2·2	1·6	1·8	1·2	1·6	1·6	2·0	47·0
June	0·4	0·9	1·3	1·5	*1·6*	*1·6*	0·6	1·2	0·3	0·5	1·0	···	···	···	···	0·9	···	0·5	0·5	···	···	0·8	0·5	0·6	14·7
July	2·5	2·8	3·5	3·4	3·5	3·5	3·6	3·8	2·2	2·4	1·6	1·0	0·6	1·4	0·8	1·4	2·3	2·0	2·4	1·9	*4·8*	4·2	1·3	2·0	58·9
Aug.	0·8	2·4	1·7	1·4	2·6	3·0	2·2	3·4	2·4	3·0	3·2	2·6	2·7	1·9	3·5	5·0	*7·8*	4·2	3·8	3·8	0·4	1·0	0·4	0·4	63·6
Sept.	1·4	2·0	1·9	0·8	1·1	1·4	0·4	1·0	1·0	0·1	···	···	···	···	0·4	···	···	···	···	1·1	0·5	2·0	1·5	*2·4*	19·0
Oct.	0·6	3·0	4·1	4·1	2·9	3·2	4·3	3·7	4·9	*5·8*	4·4	2·8	3·4	3·4	2·9	4·3	3·3	3·4	3·1	2·4	3·1	3·8	2·3	1·6	80·8
Nov.	5·6	6·9	4·9	2·9	4·4	5·7	5·3	4·3	4·8	4·2	4·3	1·8	4·1	6·1	5·5	7·2	5·9	5·6	4·7	4·9	5·9	6·7	7·0	*7·9*	126·6
Dec.	1·0	···	0·9	1·3	*2·8*	2·0	1·0	1·9	1·0	···	···	0·6	1·3	2·0	2·1	2·7	2·6	2·0	0·6	1·1	0·6	1·4	0·6	1·0	30·5
Annual	29·9	34·4	37·7	39·1	40·6	40·3	42·0	*43·1*	37·1	36·7	32·0	22·7	26·0	27·2	31·5	37·5	38·9	31·3	29·0	32·0	33·2	38·9	33·3	34·8	829·2

NOTES ON RAINFALL

72 ABERDEEN: 1941

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": No occasions
"Partial drought": No occasions
"Dry spells": May 27-June 17

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spells": No occasions
"Wet spells": No occasions

Rainfall Duration

Hours	0·1-1·0	1·1-2·0	2·1-6·0	6·1-12·0	>12
Number of days	72	29	73	26	16

Continuous or Heavy Falls

The outstanding fall during the year was that of October 10 when 62·1 mm. were recorded in 18·5 hr.; during this fall 10 mm. were recorded in 72 min. and 25 mm. in 4 hr. On August 13, 26 mm. fell in 11·2 hr., of which amount 10 mm. fell in 35 min. and 5 mm. in 15 min.

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 142 mm./hr. on August 22.

73 ABERDEEN: h_s (height of recorder above ground) = 20·7 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	1·4	21	···	···	3·3	31	···	···	13·4	87	8·5	49	4·6	26	0·1	1	1·5	11	2·2	19	0·1	1	1·0	14
2	0·1	1	···	···	8·5	*80*	···	···	7·6	49	7·6	44	0·9	5	0·7	4	2·6	19	*9·4*	82	···	···	1·2	17
3	2·8	42	4·4	52	2·3	21	···	···	*14·0*	*90*	9·6	55	4·9	28	1·6	10	*8·5*	*62*	0·1	1	0·8	9	3·8	54
4	3·2	47	6·0	70	3·9	36	···	···	4·9	31	0·8	5	6·3	36	0·3	2	6·0	44	0·1	1	···	···	0·2	3
5	3·9	57	···	···	6·5	60	2·6	19	3·9	25	4·3	25	2·4	14	4·8	30	···	···	···	···	0·5	6	···	···
6	4·7	*68*	6·1	70	3·2	29	···	···	1·6	10	13·8	78	1·1	6	5·0	31	3·1	23	···	···	0·9	10	3·5	51
7	···	···	0·2	2	2·2	20	···	···	1·2	8	···	···	···	···	8·4	53	8·3	62	3·2	29	3·3	38	1·6	24
8	···	···	···	···	···	···	···	···	···	···	···	···	*12·3*	*70*	5·6	36	1·6	12	0·1	1	2·4	28	···	···
9	···	···	7·0	*79*	8·1	72	10·2	74	7·0	44	0·4	2	9·8	56	2·3	15	2·0	15	···	···	···	···	0·6	9
10	0·1	1	6·5	72	0·3	3	···	···	3·2	20	8·0	45	11·4	65	3·9	25	1·9	14	···	···	···	···	*5·0*	*75*
11	0·2	3	2·5	27	0·2	2	···	···	11·5	71	12·2	69	9·7	56	5·7	37	0·6	5	7·4	69	···	···	0·1	1
12	···	···	···	···	···	···	0·8	6	6·5	40	7·9	45	6·8	39	8·1	53	3·9	30	8·6	81	···	···	4·6	69
13	1·0	14	···	···	7·7	67	5·3	38	0·9	6	5·2	29	···	···	···	···	1·8	14	···	···	···	···	···	···
14	3·1	43	···	···	1·5	13	3·6	26	9·8	60	3·8	21	···	···	4·7	31	3·4	26	0·7	7	···	···	2·6	39
15	0·7	10	···	···	*9·0*	77	3·9	27	6·1	37	4·9	28	0·1	1	10·9	72	4·8	37	6·9	66	···	···	2·4	36
16	*4·9*	67	···	···	7·3	62	···	···	9·3	56	11·7	66	5·0	29	···	···	7·7	61	5·6	54	0·8	10	3·8	58
17	0·9	12	···	···	···	···	···	···	4·9	30	1·6	9	10·6	62	5·6	37	1·3	10	0·1	1	0·3	4	2·3	35
18	0·1	1	0·3	3	5·7	48	1·5	10	5·0	30	9·9	56	···	···	9·1	61	0·1	1	1·1	11	0·6	8	3·3	50
19	0·7	9	···	···	···	···	···	···	3·5	21	11·5	65	0·1	1	5·7	38	1·4	11	···	···	0·1	1	4·6	70
20	3·5	46	···	···	3·3	27	0·1	1	1·6	10	*14·5*	*81*	1·9	11	9·8	66	0·2	2	8·1	81	0·1	1	···	···
21	···	···	0·6	6	7·0	57	···	···	4·2	25	0·1	1	3·0	18	0·2	1	3·8	31	8·3	*84*	···	···	0·4	6
22	···	···	5·0	50	0·2	2	0·1	1	3·8	22	9·6	54	5·2	31	3·8	26	···	···	6·6	67	0·1	1	1·5	23
23	···	···	5·1	50	7·2	59	*12·7*	*86*	···	···	7·6	43	3·1	18	*12·5*	*86*	4·3	36	3·5	36	···	···	···	···
24	···	···	3·7	37	8·5	69	9·3	62	1·9	11	14·2	80	3·0	18	5·5	38	···	···	4·5	46	···	···	···	···
25	···	···	*7·7*	75	5·4	43	7·5	50	13·1	77	9·1	51	2·9	17	0·2	1	0·4	3	0·1	1	*5·7*	*77*	3·2	48
26	···	···	2·3	22	···	···	10·8	72	···	···	9·3	52	3·9	23	4·2	29	0·6	5	0·8	8	···	···	···	···
27	···	···	···	···	···	···	2·8	19	0·6	4	4·7	26	6·9	42	4·1	29	···	···	0·1	1	···	···	3·6	55
28	···	···	4·5	43	1·9	15	6·9	45	4·2	24	0·8	4	5·3	32	5·1	36	···	···	0·8	9	3·3	46	1·1	17
29	···	···			8·2	64	0·1	1	4·0	23	1·7	10	···	···	3·0	21	3·7	32	4·9	53	0·3	4	···	···
30	···	···			8·5	66	···	···	11·3	65	3·5	20	2·1	13	3·0	21	1·2	10	···	···	···	···	0·3	4
31	···	···			···	···			7·1	41			1·2	7	4·7	34			1·8	20			···	···
Mean	1·01	–	2·21	–	3·87	–	2·61	–	5·36	–	6·56	–	4·02	–	4·47	–	2·49	–	2·74	–	0·64	–	1·64	–
											Annual mean		3·14	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

74 ABERDEEN: h_s = 20·7 m. 1941

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	=	–	–	–	···	0·3	3·2	6·9	*8·0*	7·3	4·9	0·7	···	···	–	–	–	–	31·3	14
Feb.	–	–	–	···	···	3·9	7·4	8·4	*10·2*	10·0	9·5	7·5	4·3	0·7	...	–	–	–	61·9	24
Mar.	–	–	···	1·2	4·2	9·7	14·1	15·3	*15·9*	14·7	13·1	14·3	11·3	6·1	...	...	–	–	119·9	33
Apr.	–	···	3·9	4·6	4·9	5·3	6·2	7·5	7·3	*7·6*	6·9	6·9	7·3	5·6	2·5	1·7	···	–	78·2	18
May	···	3·0	8·8	9·5	10·3	10·9	12·2	13·6	14·6	15·1	*16·9*	14·5	12·1	11·0	7·0	6·0	0·6	···	166·1	33
June	0·4	4·4	7·6	10·7	12·8	14·2	11·9	10·7	13·2	14·9	16·7	*18·3*	15·2	16·0	12·6	10·1	6·3	0·8	196·8	37
July	···	2·1	6·3	6·5	7·8	8·1	7·5	9·1	12·5	*15·1*	11·9	8·9	7·9	7·5	6·5	4·6	2·0	0·2	124·5	23
Aug.	···	0·4	5·8	9·9	13·0	12·5	11·7	12·0	*14·4*	11·6	11·8	9·3	10·4	9·7	4·8	1·3	···	···	138·6	30
Sept.	–	–	0·3	1·9	3·2	3·2	5·0	5·6	7·0	8·2	9·8	*9·9*	9·3	7·1	3·9	0·3	–	–	74·7	20
Oct.	–	–	–	···	2·9	7·8	9·6	10·1	10·3	*11·3*	*11·3*	8·9	7·8	5·0	···	–	–	–	85·0	27
Nov.	–	–	–	–	···	0·1	2·1	*3·6*	2·7	3·3	3·1	3·4	1·0	···	–	–	–	–	19·3	8
Dec.	–	–	–	–	–	···	3·1	11·1	*11·9*	10·9	9·5	4·2	···	–	–	–	–	–	50·7	24
Annual	0·4	9·9	32·7	44·3	59·1	76·0	94·0	113·9	128·0	*130·0*	125·4	106·8	86·6	68·7	37·3	24·0	8·9	1·0	1147·0	26

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

75 ABERDEEN: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 24 m. + 13 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	3·8	13	4·4	15	4·9	17	4·8	14	3·3	10	3·9	10	2·7	9	4·9	14	2·7	10	2·5	10	1·4	5	3·4	17
2	*1·3*	7	4·3	12	1·5	9	5·0	14	2·8	9	3·6	10	2·3	11	0·8	7	1·7	9	2·0	11	1·6	7	1·3	6
3	1·9	7	4·1	15	*1·0*	6	4·9	15	3·6	11	2·7	8	2·6	13	1·0	7	2·0	11	0·6	4	2·7	10	1·1	11
4	5·1	18	3·0	17	2·0	8	4·7	13	3·6	11	2·4	7	3·0	11	1·4	7	1·1	9	*0·6*	5	*1·0*	6	1·7	6
5	5·6	16	*9·5*	*29*	1·5	7	3·5	12	3·8	12	1·9	7	3·2	12	6·0	*21*	2·6	11	2·2	7	2·1	9	2·2	13
6	2·6	11	2·3	7	2·3	10	3·5	13	4·2	14	3·2	10	4·9	17	*6·9*	19	2·3	10	2·0	9	5·4	23	6·8	21
7	1·8	9	5·9	24	3·4	11	2·1	8	2·6	10	2·5	8	2·6	10	3·4	15	1·4	5	1·4	7	7·5	22	*9·9*	*27*
8	2·2	7	2·4	12	4·3	12	*1·2*	6	*1·8*	9	1·5	5	2·1	12	1·4	8	2·1	9	1·2	7	3·3	15	4·1	20
9	1·9	6	3·3	13	4·0	12	2·9	9	2·3	10	3·5	11	2·7	11	2·7	9	2·7	12	3·4	11	6·3	21	2·0	13
10	5·0	13	3·6	21	2·7	11	2·3	7	3·8	11	4·7	17	1·9	7	1·8	10	1·6	11	6·3	20	*12·7*	29	4·6	16
11	3·3	11	*1·6*	7	1·7	6	2·3	9	2·1	7	5·4	15	1·5	7	3·2	12	2·9	12	3·1	14	10·7	*29*	2·9	14
12	3·8	12	5·5	16	3·2	9	3·7	*18*	2·9	11	5·7	17	5·1	13	3·6	14	2·2	12	2·0	11	2·7	13	5·9	20
13	3·2	11	7·6	17	2·8	10	3·9	18	4·2	12	4·4	15	5·4	13	3·7	20	3·0	11	1·6	9	5·8	17	4·9	19
14	2·9	10	6·2	15	2·1	8	3·7	15	4·5	*17*	2·8	10	1·9	8	4·8	18	*4·6*	*15*	2·9	14	3·0	15	5·0	16
15	4·0	15	3·0	11	1·0	4	2·3	12	3·8	13	*6·0*	*18*	1·0	7	2·0	9	1·7	6	3·8	16	5·0	14	5·9	19
16	4·4	15	3·9	16	1·7	7	3·8	16	3·8	14	3·6	15	2·5	12	3·4	18	1·4	6	3·7	15	5·0	13	3·3	14
17	4·4	12	4·8	18	4·2	13	4·3	18	3·0	13	2·0	12	3·3	13	3·0	11	0·8	3	2·9	13	3·2	13	5·5	15
18	4·5	18	3·0	11	4·5	15	2·4	11	2·9	12	1·4	9	3·3	13	2·5	11	*0·7*	4	2·6	17	3·6	11	1·2	6
19	7·1	*23*	2·7	10	1·1	6	*5·2*	13	2·2	7	2·2	9	4·5	13	2·9	12	1·3	7	3·0	18	2·7	9	1·8	7
20	3·0	13	3·3	9	2·1	10	3·7	13	2·2	7	2·3	8	2·2	9	1·8	8	0·8	5	7·3	*28*	4·2	17	2·5	11
21	7·9	20	2·6	8	7·1	24	2·3	6	3·7	17	1·5	10	3·9	*19*	0·8	4	1·2	5	3·8	20	5·9	23	3·9	16
22	*8·1*	22	2·4	7	2·4	7	3·9	13	3·7	15	3·1	11	3·9	11	1·5	10	1·6	8	4·8	19	5·6	19	4·2	24
23	3·0	11	3·7	10	4·0	18	3·8	12	2·0	8	3·1	14	2·7	9	1·3	7	2·9	12	2·5	10	4·1	15	3·9	17
24	4·6	13	3·0	10	2·8	11	3·1	11	4·4	15	3·4	12	2·6	11	*0·7*	5	4·0	11	1·3	5	4·2	15	8·6	24
25	5·5	15	2·1	8	3·6	13	3·6	11	3·3	13	3·7	12	1·6	8	2·2	7	2·6	11	3·3	13	4·3	24	6·4	17
26	4·9	13	4·0	19	*9·4*	*27*	2·8	9	3·5	12	3·3	12	*0·9*	5	1·9	11	3·1	13	5·1	17	8·1	26	2·2	10
27	7·4	18	7·7	26	6·9	21	2·9	15	3·2	9	2·9	11	2·1	9	3·3	13	3·6	13	7·0	23	7·0	23	2·1	13
28	7·4	17	6·0	20	5·6	19	2·1	8	2·4	8	2·2	10	2·2	11	2·4	12	4·5	14	*8·1*	21	1·8	5	2·0	9
29	5·7	14			4·4	14	2·1	7	*7·1*	16	*1·1*	6	2·2	7	1·7	8	2·9	15	6·5	27	2·5	10	1·7	5
30	5·1	13			1·7	7	2·8	9	3·8	12	2·3	9	2·3	10	3·1	12	2·0	11	1·5	8	3·2	9	2·0	7
31	2·4	10			2·9	12			2·3	8			*5·6*	14	1·5	6			2·7	11			*0·5*	6

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

76 ABERDEEN: h_a = 24 m. + 13 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·4	4·4	4·2	4·1	4·1	4·2	4·1	*4·0*	4·1	4·1	4·3	*4·6*	4·5	4·5	4·3	4·4	4·4	4·4	4·5	4·4	4·4	4·4	4·4	4·3	4·3
Feb.	3·8	3·8	3·8	4·0	4·1	4·0	4·0	4·1	*3·6*	3·9	4·1	4·3	4·8	*4·8*	4·7	4·5	4·3	4·1	4·0	3·8	4·2	4·3	4·3	4·1	4·1
Mar.	2·9	2·9	2·9	2·8	2·7	3·0	3·0	3·1	3·3	3·6	4·0	*4·4*	4·4	4·3	4·3	4·0	3·6	3·4	3·1	3·0	2·7	2·7	2·8	*2·6*	3·3
Apr.	3·1	3·0	2·9	2·9	2·9	*2·7*	2·9	3·0	3·4	3·6	3·6	3·7	4·0	*4·2*	4·0	4·0	3·7	3·5	3·3	3·3	3·2	2·9	3·0	2·9	3·3
May	2·4	2·6	2·5	2·7	2·6	2·8	3·2	3·4	3·7	4·0	4·3	4·5	4·4	*4·7*	4·6	4·4	3·9	3·6	3·3	2·9	2·5	2·4	*2·2*	2·3	3·3
June	2·1	2·1	2·1	2·1	2·3	2·3	2·8	3·2	3·6	3·9	3·8	4·0	4·2	4·2	*4·3*	4·3	4·0	3·8	3·2	2·9	2·6	*2·0*	2·1	2·2	3·1
July	2·0	2·0	*1·8*	2·0	2·0	2·2	2·6	3·0	3·2	3·5	3·7	3·8	*4·0*	3·9	3·9	3·7	3·4	3·3	3·0	2·6	2·3	2·4	2·3	2·2	2·9
Aug.	2·1	2·0	2·1	2·2	2·3	2·2	2·4	2·6	3·1	3·3	3·4	3·5	*3·7*	3·4	3·4	3·3	2·8	2·7	2·4	2·3	2·1	1·9	2·0	*1·9*	2·6
Sept.	*1·5*	1·6	1·7	1·8	1·9	1·9	1·9	2·1	2·4	2·7	2·8	2·9	3·2	3·3	*3·4*	3·1	2·9	2·8	2·0	1·8	1·8	1·8	1·6	1·6	2·3
Oct.	3·0	3·1	3·1	3·2	3·2	2·9	3·0	*2·8*	2·9	3·2	3·7	3·9	3·9	*4·0*	4·0	3·8	3·4	3·4	3·2	3·0	3·0	2·9	2·9	3·1	3·3
Nov.	4·6	4·8	4·7	4·4	4·5	4·8	4·7	4·3	4·3	4·4	4·7	4·9	4·8	4·9	*4·9*	4·6	4·4	4·4	4·2	*4·1*	4·2	4·5	4·7	4·5	4·6
Dec.	3·7	3·5	3·5	3·7	3·6	3·7	3·9	3·5	3·8	*4·2*	4·1	4·0	3·9	3·9	3·9	3·7	3·6	3·5	3·5	3·4	3·3	*3·2*	3·2	3·6	3·7
Annual	3·0	3·0	2·9	3·0	3·0	3·1	3·2	3·2	3·4	3·7	3·9	4·0	4·1	*4·2*	4·1	4·0	3·7	3·6	3·3	3·1	3·0	2·9	3·0	*2·9*	3·4

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

77 ABERDEEN: h_a = 24 m. + 13 m. 1941

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	1	1	210	465	68	0	110	11	18 22	23	19 7 20
Feb.	–	0	3	14	163	417	78	0	180	13	15 12	29	5 11 10
Mar.	–	0	2	14	100	454	176	0	120	13	26 20	27	26 20 35
Apr.	–	0	1	1	79	559	81	0	310	12	12 12	18	12 11 5
May	–	0	–	0	102	527	115	0	330	9	29 9	17	14 11 40
June	–	0	–	0	81	473	166	0	310	9	15 10	18	15 9 35
July	–	0	–	0	81	453	210	0	310	10	21 16	19	21 15 10
Aug.	–	0	1	3	80	368	293	0	340	11	5 20	21	5 17 50
Sept.	–	0	–	0	24	406	290	0	310	8	14 5	15	14 4 10
Oct.	–	0	3	6	143	394	201	0	250	13	20 3	28	20 2 25
Nov.	–	0	5	32	201	346	141	0	130	17	11 5	29	11 2 15
Dec.	–	0	3	14	172	370	188	0	310	13	7 13	27	7 12 15
Year	–	0	19	85	1436	5232	2007	0	130	17	Nov. 11 5	29	(Feb. 5 11 10) (Nov. 11 2 15)

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (1ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

78 ABERDEEN 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·2	78·2	75·2	76·4	75·0	76·0	76·0	77·0	80·1	79·0	84·3	81·4	87·3	84·2	87·9	85·8	87·0	85·8	84·8	85·7	79·9	82·4	79·2	80·7
2	76·0	78·2	75·1	76·4	75·1	76·1	76·0	77·0	80·9	79·0	84·5	81·5	87·6	84·4	87·5	85·8	87·1	85·9	85·1	85·6	79·6	82·3	78·6	80·7
3	75·9	78·1	75·0	76·4	75·3	76·2	76·1	77·0	81·1	79·2	84·3	81·8	87·7	84·4	87·9	85·9	87·3	85·9	85·4	85·5	79·3	82·3	78·4	80·7
4	75·6	78·0	74·9	76·4	75·3	76·1	76·1	77·0	81·1	79·2	84·7	81·9	87·6	84·6	87·9	85·9	87·6	85·9	85·7	85·5	79·5	81·9	77·9	80·4
5	75·3	78·0	74·7	76·3	75·2	76·1	76·1	77·0	81·1	79·3	84·3	82·1	87·1	84·7	87·5	85·9	87·5	86·0	85·8	85·4	79·8	82·0	77·4	80·4
6	75·0	78·0	74·6	76·4	75·1	76·2	76·2	77·0	81·0	79·4	84·1	82·1	87·0	84·7	87·1	85·9	87·3	86·0	85·8	85·4	79·8	81·8	77·6	80·2
7	75·0	77·9	74·6	76·4	75·2	76·2	76·3	77·0	80·5	79·5	84·7	82·1	87·1	84·7	86·5	85·9	86·8	86·1	86·0	85·4	79·5	81·8	77·6	80·2
8	75·0	77·9	74·7	76·3	75·7	76·2	76·7	76·9	80·5	79·7	84·2	82·1	87·2	84·7	86·5	85·9	86·6	86·1	85·6	85·4	78·7	81·7	77·2	80·1
9	74·8	77·6	75·0	76·2	76·0	76·2	76·8	77·1	80·2	79·8	84·0	82·2	87·9	84·8	86·7	85·8	86·6	86·0	85·8	85·3	78·1	81·5	77·3	80·0
10	74·8	77·6	75·0	76·2	76·1	76·2	77·0	77·0	81·0	79·9	83·9	82·3	88·0	84·8	86·7	85·8	86·9	86·0	85·2	85·3	78·2	81·3	77·8	79·9
11	74·7	77·3	75·0	76·2	76·2	76·3	77·1	77·0	81·0	79·9	84·0	82·4	88·0	84·9	87·1	85·8	87·0	85·9	84·3	85·3	78·9	81·2	78·4	79·7
12	74·7	77·2	75·0	76·2	76·2	76·3	78·1	77·1	81·4	79·9	83·9	82·4	88·1	85·2	87·1	85·8	86·6	85·9	83·5	85·2	79·6	81·0	78·6	79·7
13	74·9	77·1	75·2	76·2	76·2	76·4	79·0	77·2	81·7	79·9	83·5	82·5	88·3	85·2	87·0	85·8	86·6	86·0	82·7	85·1	79·7	80·8	78·4	79·7
14	74·9	77·1	75·4	76·2	76·3	76·5	79·5	77·3	81·1	80·0	83·7	82·5	87·9	85·2	86·7	85·8	86·9	85·9	82·9	85·0	79·7	80·8	78·4	79·7
15	75·0	77·0	75·8	76·2	76·2	76·7	79·1	77·5	81·0	80·0	84·4	82·5	87·3	85·3	86·7	85·8	86·6	85·8	82·9	84·9	79·9	80·9	78·2	79·7
16	74·9	77·0	76·1	76·2	76·2	76·7	79·0	77·7	80·6	80·1	84·7	82·5	87·8	85·3	87·0	85·8	86·7	85·9	83·1	84·7	79·3	80·9	77·8	79·7
17	74·7	76·9	76·0	76·3	76·1	76·7	79·0	77·8	80·7	80·1	85·3	82·6	88·0	85·4	86·7	85·8	86·4	85·8	82·9	84·4	79·2	80·9	77·6	79·7
18	74·8	77·0	75·7	76·4	76·3	76·7	79·2	78·0	81·3	80·1	85·7	82·7	87·7	85·4	86·8	85·8	86·3	85·8	82·6	84·4	79·7	80·8	77·3	79·6
19	74·7	76·9	75·4	76·5	76·5	76·7	79·5	78·0	81·9	80·1	86·1	82·8	87·4	85·5	87·0	85·8	86·5	85·8	81·9	84·4	79·8	80·7	76·9	79·6
20	74·7	76·9	75·2	76·5	76·8	76·8	79·1	78·1	82·4	80·2	86·1	83·0	86·9	85·5	87·0	85·8	86·6	85·8	82·1	84·3	79·6	80·8	77·6	79·3
21	74·6	76·9	75·0	76·5	77·1	77·0	79·0	78·1	82·7	80·3	86·2	83·0	87·0	85·5	87·0	85·8	86·2	85·8	81·8	84·1	79·7	80·7	76·7	79·3
22	74·5	76·8	75·0	76·6	77·1	77·0	79·0	78·3	82·6	80·4	86·0	83·2	86·6	85·6	86·9	85·8	85·9	85·8	81·4	84·0	79·8	80·8	77·1	79·2
23	74·4	76·5	74·9	76·6	77·0	77·0	79·0	78·4	82·9	80·6	87·0	83·4	87·0	85·6	86·9	85·8	85·9	85·8	81·0	83·7	80·1	80·7	76·9	79·1
24	74·3	76·5	74·8	76·5	76·8	77·0	79·0	78·6	82·7	80·7	87·0	83·5	87·0	85·7	87·0	85·8	86·2	85·8	80·9	83·6	80·4	80·8	77·7	79·1
25	74·9	76·4	74·7	76·3	76·7	77·1	79·2	78·6	82·9	80·9	87·1	83·5	87·2	85·5	87·2	85·8	86·0	85·8	80·8	83·4	80·7	80·8	77·9	79·0
26	74·9	76·4	74·7	76·2	76·9	77·1	80·0	78·7	83·0	81·0	87·0	83·8	87·6	85·6	87·2	85·9	86·3	85·8	80·7	83·2	79·8	80·8	77·3	79·0
27	74·9	76·3	74·4	76·1	76·2	77·1	80·0	78·7	82·8	81·0	87·0	83·9	88·2	85·5	87·0	85·8	86·4	85·7	80·6	83·1	80·1	80·8	76·8	79·0
28	74·7	76·4	74·5	76·1	76·2	77·1	79·7	78·7	82·9	81·0	86·3	83·9	88·5	85·7	87·0	85·9	86·4	85·7	81·0	82·9	80·2	80·8	76·2	78·9
29	74·9	76·4			76·1	77·1	80·0	78·9	83·3	81·2	86·8	84·1	88·5	85·7	87·0	85·9	86·2	85·7	80·3	83·0	79·3	80·8	75·9	78·9
30	75·0	76·4			76·1	77·1	80·1	78·8	83·3	81·2	87·1	84·2	88·0	85·8	87·0	85·8	85·6	85·8	79·7	82·8	79·1	80·8	76·0	78·8
31	75·1	76·4			76·0	77·0			83·9	81·3			88·0	85·8	87·0	85·8			79·8	82·5			76·4	78·7
Mean	75·0	77·1	75·1	76·3	76·1	76·6	78·2	77·7	81·7	80·1	85·3	82·7	87·6	85·2	87·0	85·8	86·6	85·9	83·0	84·5	79·6	81·2	77·5	79·6
											Year		81·1	81·1										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

79 ABERDEEN 1941

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	64·2	72·8	73·6	74·2	72·4	77·4	84·8	84·1	80·2	73·4	72·0	76·8
2	66·8	70·5	70·9	73·7	75·5	78·9	83·1	76·9	83·1	77·9	71·4	69·2
3	*58·0*	69·6	68·9	74·6	72·1	76·6	84·0	82·2	78·8	77·9	72·1	71·1
4	62·4	68·8	70·2	74·7	71·6	78·2	78·2	76·9	79·2	81·2	75·7	71·8
5	66·6	69·5	65·3	72·3	74·4	78·1	75·3	80·9	84·7	83·7	71·7	70·8
6	66·4	72·8	70·2	69·0	72·8	76·1	84·2	80·1	78·7	83·8	78·1	75·0
7	61·8	68·8	72·2	72·6	73·6	78·3	86·3	77·8	75·2	75·9	74·6	72·9
8	72·5	74·2	73·1	73·2	75·1	79·6	82·2	78·0	75·8	84·0	72·0	73·1
9	73·5	73·8	75·7	71·7	74·8	79·6	79·3	*76·3*	80·2	83·7	*67·3*	75·1
10	73·3	70·3	74·1	70·2	76·8	77·9	78·7	82·3	82·7	80·9	78·9	75·6
11	74·6	68·4	73·2	76·3	72·8	74·1	79·8	82·3	83·0	77·5	78·3	76·8
12	75·7	72·8	74·1	76·3	72·0	*74·1*	85·4	79·2	76·6	71·0	79·3	77·4
13	74·7	75·6	72·4	78·9	75·1	77·6	85·7	76·3	80·8	*69·8*	78·8	74·3
14	71·9	74·1	70·7	76·1	72·8	79·6	85·1	82·4	84·9	80·1	77·4	76·2
15	66·9	76·1	67·0	72·5	70·7	82·0	81·7	79·1	80·2	73·2	75·5	73·9
16	65·7	71·8	65·3	72·4	*68·1*	79·3	84·1	82·1	75·9	81·8	74·6	73·3
17	67·4	74·2	70·5	79·2	70·2	84·4	78·1	78·6	75·4	75·1	77·8	74·5
18	59·1	71·5	75·2	74·7	76·6	83·6	83·1	77·6	83·5	77·6	79·0	71·2
19	71·9	71·8	70·3	76·0	74·4	78·1	81·4	81·4	84·0	71·6	77·6	71·3
20	68·9	70·7	70·3	76·9	77·8	77·6	81·5	80·2	81·2	79·8	77·9	68·4
21	71·3	72·3	76·4	75·9	79·1	78·4	*75·1*	78·4	72·7	73·7	72·3	74·6
22	72·9	65·2	72·1	76·8	76·9	84·1	79·7	80·3	82·6	71·1	71·8	72·1
23	73·1	69·8	70·2	72·6	80·5	85·7	81·7	76·3	78·1	72·9	81·4	73·2
24	74·7	71·8	68·7	*68·7*	79·2	79·2	80·6	77·1	84·1	71·2	78·9	79·3
25	73·2	69·3	70·2	75·2	74·1	78·9	78·6	80·3	84·4	71·0	76·7	73·4
26	72·9	*65·2*	72·6	71·3	79·7	80·4	85·8	76·3	85·4	74·8	70·3	72·7
27	73·5	71·1	73·0	72·0	77·2	81·2	84·2	78·6	85·1	75·1	80·9	69·7
28	73·8	76·2	73·4	(74·1)	74·8	84·0	82·6	83·0	85·0	76·4	71·8	*65·3*
29	73·8		69·7	74·0	78·5	80·6	84·7	80·7	81·4	72·4	71·2	72·9
30	74·6		*64·2*	76·4	79·4	79·9	82·4	79·7	*72·7*	72·0	77·9	73·6
31	74·2		68·7		77·9		82·9	82·4		77·3		74·1
Mean	70·0	71·4	71·0	74·1	75·1	79·5	81·9	79·6	80·5	76·4	75·4	73·2
						Year	75·7					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude	55°19′ N.
Longitude	3°12′ W.
G.M.T. of Local Mean Noon	12h. 13m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	237·3	..
Thermometer bulbs	..	0·9
Rain-gauge	242·0	..
Beckley rain-gauge rim	..	0·4
Sunshine recorder	..	1·5
Pressure-tube anemograph	250	15

INTRODUCTION

No changes of site or in the meteorological instruments occurred except that in September 1940 the Beckley self-registering rain-gauge was replaced by a Dines tilting syphon rain recorder. Reference should be made to the 1938 volume for details.

NOTES ON THE METEOROLOGICAL SUMMARIES

The extreme temperatures recorded during the year were 299·5°A. (79·7°F.) on June 21 and 255·8°A. (1·0°F.) on January 4 and 6. January 4, with a mean temperature of 260·4°A. (9·3°F.), was the coldest day of the year and June 21, with 292·6°A. (67·3°F.), was the hottest. There were 16 ice days, i.e. days with maximum temperature below 273°A.; 13 of these occurred in January, and 3 in February.

The total rainfall for the year 1230·3 mm. (48·44 in.) was below normal. Snow fell on 57 days.

The total duration of bright sunshine, 1130·4 hr., was below the normal.

The highest gust of wind during the year was 31·2 m./sec. (70 m.p.h.) and was recorded on November 25; the highest hourly speed 19·0 m./sec. (43 m.p.h.), occurred on February 28.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. For purposes of comparison the corresponding data are also given, derived from the mean inequalities for the period 1911-20 by Dr. A. Crichton Mitchell*.

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* MITCHELL, A. CRICHTON: On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfriesshire. *Quart. J.R. met. Soc., London*, 50, 1924, p.127.

HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ESKDALEMUIR, LONGITUDE 3°12′ W.

Values of c_n, α_n in the series $\sum c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1941	1911-1920	1941	1911-1920	1941	1911-1920	1941	1911-1920	1941	1911-1920	1941	1911-1920	1941	1911-1920	1941	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.17	0.09	182	346	0.27	0.23	155	152	0.14	0.13	360	345	0.05	0.05	223	214
February	0.42	0.12	137	215	0.32	0.27	141	138	0.08	0.08	350	341	0.03	0.04	48	68
March	0.22	0.13	213	185	0.34	0.30	159	145	0.04	0.05	359	335	0.05	0.05	357	25
April	0.24	0.21	83	92	0.32	0.30	151	155	0.00	0.02	53	156	0.06	0.05	327	356
May	0.36	0.23	51	53	0.27	0.27	149	147	0.05	0.07	163	160	0.04	0.03	323	330
June	0.14	0.15	48	54	0.26	0.23	148	146	0.10	0.08	151	161	0.01	0.02	351	326
July	0.14	0.17	85	69	0.22	0.21	145	141	0.07	0.08	153	156	0.03	0.02	326	300
August	0.13	0.11	120	115	0.17	0.24	142	148	0.07	0.06	150	157	0.04	0.05	350	331
September	0.24	0.12	126	88	0.31	0.31	155	152	0.02	0.01	61	111	0.04	0.05	358	345
October	0.20	0.11	133	76	0.22	0.31	165	159	0.05	0.06	7	8	0.05	0.04	350	33
November	0.17	0.13	139	183	0.25	0.24	184	168	0.10	0.10	6	9	0,03	0.01	285	146
December	0.24	0.14	351	97	0.21	0.21	157	147	0.09	0.12	351	4	0.05	0.07	189	213
Arithmetic mean	0.22	0.14			0.26	0.26			0.07	0.07			0.04	0.04		
Year	0.13	0.09	109	91	0.26	0.26	154	150	0.03	0.02	29	42	0.02	0.02	329	342
Winter	0.12	0.04	136	165	0.25	0.24	158	151	0.10	0.11	358	355	0.02	0.02	222	189
Equinox	0.16	0.11	134	104	0.30	0.31	157	153	0.03	0.02	15	4	0.05	0.04	347	9
Summer	0.17	0.15	67	67	0.23	0.24	147	146	0.07	0.07	153	159	0.03	0.03	336	324

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

The disposition of the instruments and the arrangement of the tables recording the results remain substantially the same as described in the 1938 volume. The Wulf quartz-thread electrometer (N.3040) was calibrated in June. No material change had taken place since the previous calibration in November 1940.

TERRESTRIAL MAGNETISM

Reference should be made to the 1938 volume for notes on the instruments and tables.

NOTES ON THE RESULTS

Comparing mean values on all days of 1941 with those for 1940 it is noted that H was unchanged, D(west) decreased by 9·7′ and V increased by 29γ. The changes in the deduced quantities N, W, I and T are +9γ, −46γ, +0·7′, +27γ. If these changes are compared with those for previous years the discontinuities introduced on January 1, 1934 in H and V and the components derived from them must be kept in mind.

The ranges between the extreme values recorded during 1941 were H, 1872γ; D, 5°39·5′; V, 1607γ. The range of 5°39·5′ in declination is equivalent to a range of about 1630γ in the component of force perpendicular to the magnetic meridian.

Table I summarizes the magnetic character figures assigned locally and the international mean character figures. At the assembly of the association of Terrestrial Magnetism and Electricity at Washington in September 1939, a new measure of magnetic disturbance, the *K* index, was agreed upon. Measurements of *K* are now given in this volume replacing the former measure $(HR_H + VR_V)10^{-4}$ in accordance with the International Association of Terrestrial Magnetism and Electricity circular letter dated January 20, 1940. The *K* index is fully described in *Terrestrial magnetism and atmospheric electricity**.

* BARTELS, J., HECK, N.H., AND JOHNSTON, H.F.: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore. Ma.* **44**, 1939, p.411

Briefly a figure is allotted, on a scale 0-9, to each 3-hr. interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the H magnetogram and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Eskdalemuir is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	8	15	30	60	105	180	300	500	750

Table I has been slightly changed in form from previous years owing to the omission of $(HR_H + VR_V)10^{-4}$. K figures and their sums have been given for each day in the main tables but as it is considered that monthly means of K figures are not a good measure of activity they are not included.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of				
	0 days	1 days	2 days	Eskdale-muir	Inter-national
January	18	12	1	0·45	0·73
February	10	18	0	0·64	0·82
March	8	17	6	0·94	1·00
April	15	14	1	0·53	0·71
May	14	17	0	0·55	0·64
June	15	15	0	0·50	0·67
July	15	13	3	0·61	0·68
August	15	12	4	0·65	0·69
September	13	14	3	0·67	0·81
October	18	10	3	0·52	0·61
November	14	13	3	0·63	0·75
December	17	13	1	0·48	0·62
Year					
1941	172	168	25	0·60	0·73
1940	156	184	26	0·65	0·72
1939	167	172	26	0·61	0·77
1938	183	135	47	0·63	0·76
1937	116	205	44	0·81	0·73
1936	144	198	24	0·67	0·65
1935	130	212	23	0·71	0·67
1934	167	178	20	0·60	0·56
1933	156	175	34	0·67	0·64
1932	126	208	32	0·74	0·71
1931	137	208	20	0·68	0·66

The values of mean absolute daily range for the months and seasons are brought together in Table II where for convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian.

The frequency distribution of absolute daily ranges recorded in 1941 is shown in Table III which contains also the percentage distribution for 1941 and for the period 1916-26.

TABLE II – ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1941			Mean 1916-26			1941			Mean 1916-26		
	H	D	V	N	W	V	H	D	V	N	W	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	75	86	49	69	73	39	68	85	65	80	88	81
February	82	96	63	69	76	38	74	95	84	80	92	80
March	191	175	158	95	94	57	172	173	211	110	113	119
April	97	90	57	98	88	54	87	89	76	114	106	113
May	92	78	54	102	88	59	83	77	72	119	106	123
June	100	83	47	92	85	46	90	82	63	107	102	96
July	148	104	72	86	82	43	133	103	96	100	99	90
August	124	94	89	98	88	55	112	93	119	114	106	115
September	174	154	129	100	92	63	157	152	172	116	111	131
October	79	91	65	94	93	57	71	90	87	109	112	119
November	85	92	65	62	66	34	77	91	87	72	80	71
December	85	73	54	60	64	33	77	72	72	70	77	69
Winter	82	87	58	65	70	36	74	86	77	76	84	75
Equinox	135	127	102	97	92	58	122	126	137	113	111	121
Summer	116	90	65	95	86	51	105	89	87	110	104	106
Year	111	101	75	86	83	48	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III – FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1941			Percentage distribution					
				H	N	D	W	V	
	H	D	V	1941	1916-26	1941	1916-26	1941	1916-26
γ				%	%	%	%	%	%
0 – 9	0	0	3	0·0	0·0	0·0	0·0	0·8	6·3
10 – 19	1	0	46	0·3	1·7	0·0	0·9	12·6	20·2
20 – 29	7	7	68	1·9	4·9	1·9	4·5	18·6	24·8
30 – 39	17	9	60	4·7	7·8	2·5	7·5	16·4	14·3
40 – 49	37	32	39	10·1	9·9	8·8	10·6	10·7	8·1
50 – 59	33	48	26	9·0	12·2	13·2	12·0	7·1	4·8
60 – 69	42	50	27	11·5	12·9	13·7	13·1	7·4	4·2
70 – 79	42	45	11	11·5	10·3	12·3	12·4	3·0	3·1
80 – 89	36	33	11	9·9	8·1	9·0	8·6	3·0	2·3
90 – 99	27	27	6	7·4	6·5	7·4	7·5	1·6	2·1
100 – 109	21	23	11	5·8	5·3	6·3	4·7	3·0	1·1
110 – 119	20	13	8	5·5	4·0	3·6	3·5	2·2	1·2
120 – 129	14	13	6	3·8	3·5	3·6	2·7	1·6	0·8
130 – 139	11	16	5	3·0	2·6	4·4	2·2	1·4	0·8
140 – 149	7	10	8	1·9	1·7	2·7	2·2	2·2	0·3
150 – 159	8	4	2	2·2	1·3	1·1	1·2	0·5	0·7
160 – 169	6	8	4	1·6	1·2	2·2	0·9	1·1	0·5
170 – 179	3	1	1	0·8	0·8	0·3	1·0	0·3	0·4
180 – 189	4	5	0	1·1	0·6	1·4	0·7	0·0	0·5
190 – 199	4	2	3	1·1	0·5	0·5	0·6	0·8	0·3
200 +	25	19	20	6·8	4·4	5·2	3·1	5·5	3·1
Days omitted	0	0	0	..	..	..	..	..	..

The average values of the diurnal inequality ranges for the year and seasons for the period 1916-26 (not the values of the range of the representative mean diurnal inequalities for this period) are given in Table IV, together with the 1941 values expressed as a percentage of the average values. The units employed are 1γ for force and 1′ for declination.

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1916-26, WITH 1941 VALUE AS PERCENTAGE

		All days					International quiet days					International disturbed days				
		N	W	V	H	D	N	W	V	H	D	N	W	V	H	D
Year	1916-26	36.6	38.7	21.9	35.6	8.26	33.7	37.5	12.0	33.4	8.10	46.1	54.4	64.5	47.5	11.28
	1941(%)	97	96	132	103	97	98	91	101	97	92	134	113	128	142	103
Winter	1916-26	22.1	27.7	15.9	18.3	6.31	18.4	19.7	5.0	15.3	4.48	31.5	51.1	53.9	28.9	10.82
	1941(%)	80	115	168	90	112	75	97	162	72	94	82	103	162	85	102
Equinox	1916-26	41.5	44.2	27.2	39.0	9.57	39.0	42.3	13.0	38.4	9.10	53.9	65.6	81.0	53.3	13.82
	1941(%)	115	104	127	125	101	101	96	93	100	107	187	149	123	215	124
Summer	1916-26	54.0	55.6	26.5	56.1	11.33	46.6	53.7	19.9	47.7	11.18	75.4	67.2	68.1	82.6	12.66
	1941(%)	100	97	108	101	92	103	93	101	103	96	120	93	128	120	78

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

Irregular changes in declination.- In connexion with the supply of declination data to mine surveyors it has been the practice to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits which were adopted in consultation with representative mine surveyors, are: less than 5′, between 5′ and 15′, between 15′ and 30′, and greater than 30′. The range is less than 5′ in about 85 per cent. of the hourly periods. The actual frequencies of occurrence of hourly ranges in the last three of the four divisions mentioned are set out below. A range of 30′ is equivalent to a change of 144γ in the component of horizontal force perpendicular to the magnetic meridian.

Number of cases per month, 1941

Range interval	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
5–15′	111	168	214	93	62	56	78	92	92	64	101	62	1193
15–30′	20	17	37	15	1	3	9	17	18	10	26	10	183
>30′	1	1	23	0	0	0	11	2	26	4	2	4	74

Hourly distribution, 1941

Range	Hour (G.M.T.) ending at																							
interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5–15′	75	75	66	54	42	38	31	33	29	30	31	36	37	30	37	37	45	44	56	60	73	86	78	70
15–30′	12	10	6	6	2	3	6	1	0	2	2	0	1	2	3	8	11	12	17	17	20	16	11	15
>30′	3	1	2	1	1	1	2	4	4	3	1	2	2	2	5	4	5	4	5	4	5	8	2	3

Principal disturbances.- Particulars of the principal magnetic disturbances recorded during the year are given in Table V. Corresponding information for the same disturbances is given in the Lerwick Section. The magnetograms for the most highly disturbed days are not reproduced in this volume, but photographic copies may be obtained on application to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C.2.

TABLE V – PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT ESKDALEMUIR, 1941

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1	Jan. 17 0	Jan. 18 5	533	17 21 18	403	17 18 8	130	66·6	17 18 2	30·7	17 17 13	35·9	1208	17 17 0	994	18 0 28	214
2	Jan. 18 10	Jan. 19 2	613	18 23 36	425	18 19 5	188	60·0	18 11 48	21·8	18 19 21	38·2	1105	18 18 50	1000	19 0 3	105
3	Feb. 21 12	Feb. 22 7	567	21 16 1	434	21 21 48	133	63·0	21 13 15	33·7	21 15 58	29·3	1153	21 15 56	997	22 3 43	156
4	Feb. 22 12	Feb. 23 5	576	22 20 54	148	22 16 7	128	62·9	23 2 4	23·3	22 16 35	39·6	1135	22 16 31	1000	22 23 46	135
5*	Mar. 1 3 58	Mar. 2 3	1415	1 17 33	93	1 21 20	1322	235·8	1 17 0	-30·6	1 14 36	266·4	>1526	1 14 10	-81	1 18 0	>1607
6	Mar. 4 9	Mar. 5 5	586	4 21 29	379	4 9 56	207	62·0	4 14 25	21·3	4 21 22	40·7	1106	4 15 27	980	5 0 22	126
7	Mar. 5 13	Mar. 5 24	578	5 18 9	409	5 22 0	169	62·8	5 14 24	33·6	5 21 17	29·2	1125	5 18 2	1022	5 22 35	103
8	Mar. 13 15	Mar. 15 1	565	14 23 12	265	14 1 19	300	68·3	14 7 56	24·8	14 0 45	43·5	1136	14 13 2	824	14 2 8	312
9	Mar. 21 10	Mar. 22 7	671	21 18 53	456	21 11 19	215	63·6	22 2 59	20·3	21 18 42	43·3	1093	21 18 41	986	22 3 22	107
10	Mar. 22 12	Mar. 23 2	636	22 18 1	447	22 17 53	189	58·2	22 23 2	17·1	22 18 0	41·1	1130	22 17 58	1027	22 23 22	103
11	Mar. 23 12	Mar. 24 4	619	23 21 40	448	23 16 38	171	62·1	23 12 6	31·9	23 21 38	30·2	1100	23 17 8	1014	23 22 23	86
12	Mar. 28 0	Mar. 29 5	573	28 21 0	398	28 20 51	175	76·2	28 15 3	24·9	28 20 30	51·3	1246	28 17 49	987	28 21 9	259
13	Mar. 29 13	Mar. 30 8	614	29 20 42	392	29 21 1	222	60·4	29 13 46	16·0	29 20 40	44·4	1165	29 19 2	962	30 2 50	203
14	Mar. 30 11	Apr. 1 2	661	30 16 43	8	31 1 9	653	114·7	30 22 0	1·0	30 23 36	113·7	1188	30 19 26	738	31 1 9	450
15	Apr. 18 21	Apr. 20 4	587	18 22 10	415	19 8 25	172	70·0	19 6 33	21·6	18 22 6	48·4	1103	19 18 22	968	19 6 5	135
16	Apr. 24 7	Apr. 25 9	637	24 17 11	346	25 1 19	291	70·9	24 14 9	32·4	24 20 38	38·5	1209	24 17 36	951	25 1 20	258
17	May 21 12	May 22 8	601	21 17 32	438	22 1 10	163	61·3	21 17 31	33·2	21 22 21	28·1	1077	21 18 55	914	22 3 18	163
18*	Jun. 10 13 15	Jun. 11 8	640	10 15 44	437	10 13 17	203	70·2	10 15 38	36·1	11 5 57	34·1	1101	10 17 39	1027	10 13 20	74
19*	Jun. 13 3 42	Jun. 14 8	582	13 17 21	422	13 8 8	160	60·2	13 13 22	24·3	14 2 42	35·9	1100	13 19 10	915	14 2 29	185
20	Jun. 17 14	Jun. 18 6	622	17 18 48	456	18 2 45	166	56·9	17 17 17	30·6	18 1 52	26·3	1073	17 20 10	967	18 3 2	106
21*	Jul. 4 3 42	Jul. 7 24	>1069	5 † †	-300	5 8 30	>1369	104·4	5 21 14	-51·3	5 13 10	155·7	1504	5 11 6	822	5 7 25	682
22	Jul. 21 1	Jul. 22 0	573	21 20 3	336	21 9 18	237	58·9	21 6 12	33·6	21 20 40	25·3	1111	21 20 0	995	21 6 35	116
23	Aug. 2 0	Aug. 2 24	595	2 16 7	444	2 8 40	151	62·1	2 2 43	39·6	2 3 27	22·5	1157	2 16 12	990	2 3 2	167
24*	Aug. 4 1 29	Aug. 5 7	888	4 14 28	257	5 0 41	631	74·1	4 14 38	25·5	4 23 38	48·6	1385	4 16 54	829	5 0 45	556
25	Aug. 26 14	Aug. 28 4	573	27 22 34	350	27 10 18	223	62·1	26 12 58	17·9	27 22 31	44·2	1146	27 15 42	840	27 1 53	306
26	Aug. 29 8	Aug. 30 7	607	29 17 39	420	30 0 43	187	56·7	29 14 0	31·5	29 17 25	25·2	1134	29 17 20	972	30 0 33	162
27*	Sept. 13 7 58	Sept. 16 7	600	13 14 34	409	13 15 23	191	63·6	13 15 12	23·8	15 19 1	39·8	1123	15 19 0	967	16 1 30	156
28	Sept. 18 3	Sept. 21 18	990	18 13 40	<-457	18 ‡ ‡	>1447	157·1	18 22 59	<-103·7	18 23 47	260·8	1437	18 13 30	<201	19 $ $	>1236
						19 ‖ ‖											
29	Sept. 24 12	Sept. 25 6	544	24 15 28	386	24 23 23	158	61·9	24 13 28	20·8	25 0 18	41·1	1122	24 18 47	917	25 0 10	205
30	Oct. 11 6	Oct. 12 5	591	11 19 10	362	11 23 0	229	55·8	11 13 43	13·6	11 23 11	42·2	1156	11 17 43	895	11 23 26	261
31	Oct. 22 13	Oct. 23 1	621	22 17 42	432	22 22 31	189	65·8	22 17 50	23·6	22 22 51	42·2	1287	22 18 7	979	22 22 32	308
32*	Oct. 31 3 42	Nov. 1 21	603	1 14 30	177	1 1 25	426	74·1	31 19 14	1·8	1 0 22	72·3	1245	1 16 22	794	1 2 7	451
33	Nov. 6 10	Nov. 7 3	595	6 18 10	404	6 22 11	191	58·4	6 12 59	10·9	6 18 3	47·5	1158	6 18 3	1000	6 22 4	158
34*	Nov. 27 3 42	Nov. 28 23	646	28 18 42	406	28 19 27	240	66·4	28 6 52	18·8	28 18 41	47·6	1174	28 18 39	959	28 5 53	215
35*	Dec. 1 6 0	Dec. 2 21	990	1 14 52	260	1 21 38	730	76·6	1 15 10	15·4	1 14 59	61·2	1476	1 15 6	935	1 23 52	541
36	Dec. 13 11	Dec. 15 23	565	15 21 33	432	14 14 38	133	56·7	13 17 20	21·1	14 21 6	35·6	1163	13 18 51	1009	14 3 23	154

† † 14h.30m. to 15h.0m. ‡ ‡ 19h.40m. to 24h.0m. $ $ 4h.57m. to 5h.5m. ‖ ‖ 0h.18m. to 4h.40m.

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk (*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added:– H, 16000γ; D, 12°; V, 44000γ.

REMARKS ON MAGNETIC AND ALLIED PHENOMENA, 1941

GENERAL.– In 1941 magnetic activity continued its decline from the maximum of 1937–38 towards the minimum of the 11-yr. cycle, which, like that of sunspot frequency, is expected about 1944-45. In the notes which follow, the sunspot data have been extracted from an article in the "*Observatory*" for May 1942.

The abbreviation C.M.P. is used for Central Meridian Passage, and areas are given in millionths of the sun's hemisphere.

JANUARY (average character figure 0·45).– The month was quiet with only one period of marked disturbance. There was some activity during the afternoon and night of January 1–2, and thereafter conditions were quiet until the 6th. A moderate disturbance in the early hours (1h. to 9h.) of this day was preceded by a sudden commencement at 5d.15h.42m. Moderate activity occurred again between 16h. and 20h. on 7th and subsequently there were slight disturbances recorded on each day's charts until 15th–16th when conditions were quiet again. The quiet period was however short-lived, for moderate oscillations in the early hours of 17th were followed by a decided disturbance which may be said to have lasted from 17d.9h. to 18d.5h.

The most marked changes were in V, the trace of which had a decided peak at 17d.17h.0m. followed by an irregular descent to a minimum at 18d.0h.28m. The changes in H and D were more in the nature of irregular oscillations without any special unity of character. The ranges recorded reached 130γ in H, 35·9′ in D and 214γ in V. The activity continued with decreasing intensity during the succeeding two days and was followed by a quiet period between 21st and 22nd. There was moderate disturbance again on each day from 23rd to 27th inclusive, and conditions were not really quiet until the 31st.

FEBRUARY (average character figure 0·64).– The month was not so quiet as January and there were two periods of moderate activity in addition to one of more decided disturbance. The month opened with two quiet days followed by moderate activity on the 3rd and more or less continual small disturbances from 17h. on the 5th to 3h. on the 10th. Further activity occurred between 0h. on the 13th and 4h. on the 16th and again between 20h. on the 16th and 22h. on the 17th. Thereafter conditions were mainly quiet until the 20th when moderate activity set in and was followed by a disturbed period which may be divided into three sections, the first commencing at 12h. on the 21st and ending at 7h. on the 22nd. The disturbance in V had a fairly well defined character with a sharp peak at 21d.15h.56m. and a minimum at 22d.3h.43m. The variations in H and D on the other hand consisted of irregular oscillations. The maximum and minimum values of H occurred at 21d.16h.1m. and 21d.21h.48m. respectively and those of D at 21d.13h.15m. and 21d.15h.58m. The ranges were H 133γ, D 29·3′, V 156γ.

The recurrence on the 22nd was of similar character. It continued from 12h. on the 22nd to 5h. on the 23rd. The disturbance in V was well defind with a maximum at 22d.16h.31m. and a minimum at 22d.23h.46m. The oscillations in H gave a maximum and a minimum at 22d.20h.54m. and 22d.16h.7m. respectively and those in D at 23d.2h.4m. and 22d.16h.35m. The ranges were H 128γ, D 39·6′, V 135γ. The third section of the disturbance extended from 12h. on the 23rd to 7h. on the 24th, the ranges being H 122γ, D 38·1′, V 122γ. Again the changes in V had the best defined character while in H rather formless oscillations persisted. The maxima of V, H and D were recorded at 23d.17h.50m., 23d.20h.2m. and 23d.23h.31m. respectively, and the minima at 23d.23h.45m., 23d.23h.38m. and 23d.18h.29m. Moderate activity continued until the 26th after which quiet conditions prevailed again until the end of the month.

MARCH (average character figure 0.94).– March was a disturbed month with two outstanding disturbances and numerous decided, though smaller, ones. The quiet conditions at the end of February were followed in March by a storm which had a well marked sudden commencement at 1d.3h.58m. Large slow downward movements with superposed oscillations began in H at about 5h.30m. and three of about 270γ were recorded between 5h. and 11h. Violent oscillations set in at 13h.17m., the La Cour trace then becoming illegible until after 14h.30m. Oscillations remained large but were slower until about 19h. The highest value, (17,734γ) occurred at 1d.17h.33m. and the lowest (16,412γ) at 1d.21h.20m. Except for one large dip at about 21h.30m. the oscillations were moderate from about 19h.30m. until about midnight, and became small by 2d.30h. The trend of D during the storm was very similar to that of H with corresponding minima until 11h., an illegible portion, large but slower oscillations until about 19h. and a similar terminal portion. The maximum value was 16° 28·2′ at 1d.17h.0m. and the minimum 12° 1·8′ at 1d.14h.36m. The early changes in V comprised a slow fall till 5h. and slower recovery between 8h. and 11h. There was little oscillation until after 1d.13h.17m., at which time a rapid increase set in. Oscillations were large and rapid between 14h. and 15h., and then, as in H and D, slower though still large until towards 1d.19h. Normal values were resumed at about 2d.3h. The maximum in V was over 46,387γ at 1d.14h.10m. and the minimum 44,780γ at 1d.18h.0m. The ranges were thus 1322γ in H, 4° 26·4′ in D and over 1607γ in V. A large sunspot, C.M.P. 27d.3h., may have been connected with this storm.

After the storm at the beginning of the month disturbance recurred daily in mainly moderate degree until the 9th inclusive. The outstanding ranges with the times of maxima and minima are given in Table VI. The changes in H and D were rather nondescript but those in V showed the oft-recurring rise to a peak in the late afternoon or evening followed by a

slower fall to a minimum round about midnight or in the early morning. Some outstanding features were a sharp isolated peak in H soon after 3d.17h., and a rather marked peak in H with a dip in D between 4d.21h. and 4d.22h.

Apart from a short-lived moderate disturbance between 11d.19h. and 11d.24h. conditions were mainly rather quiet from 10th to 12th inclusive, but there was marked activity again from 13th to 15th. This may be said to have begun at about 13d.15h. and notable oscillations ended at about 15d.1h. Fairly large downward movements in H and V were recorded between 14d.0h. and 14d.3h. with minima at 1h.19m. and 2h.8m. respectively; another occurred in H between 14d.9h. and 14d.12h. and another in V at about 14d.23h. The variation of D was not so outstanding, but the chief minimum was recorded in the same interval as those of H and V. There was no marked increase in any of the three elements during the disturbance. The extremes and the ranges will be found in Table VI.

Some activity occurred during the night of 15th–16th, followed by mainly quiet conditions until the 19th and thence disturbed conditions until the 24th. From 19th to 21st the disturbance was somewhat nondescript in H and D but had more unified structure in V; the variations were moderate. The subsequent period of disturbance may be divided into three sections from 21d.10h. to 22d.7h., 22d.12h. to 23d.2h. and 23d.12h. to 24d.4h. In these sections the outstanding extremes of the three elements roughly corresponded. The maxima, minima and ranges are given in Table VI. Noteworthy features were a sharp peak in H and dip in D shortly before 21d.19h., similar peaks and dips within an hour of the same time on 22nd and less pronounced ones at about 23d.22h.

The period from 24th to 27th inclusive was mainly quiet. Four disturbed days followed, with a mild storm on the third night. Three sections may also be specified in this disturbed period. The first started with bays at about 28d.2h. Subsequently the V trace began to rise decidedly at 28d.13h. and there were sharp peaks at about 16h. and 18h. The trace descended fairly quickly towards the minimum of V as 21h. approached and at this period there were somewhat outstanding oscillations in H and D. In the second section a distorted resemblance to the first section (with a delay of some three hours) might be discerned in V, but only the first peak (at about 29d.19h.) was outstanding. There was a fairly smooth rise preceding the peak, which was followed by a broken descent. The descent in the V trace was accompanied by three decided oscillations in both the elements H and D. In the storm which followed on the 30th V increased more or less uniformly during the day; remained fairly steady at nearly its highest value from about 18h. to 19h.; and then underwent an oscillatory decrease to its minimum at about 31d.1h. This period between the maximum and minimum was the period of stormy conditions. There were three outstanding downward oscillations of the order of 250γ in V, each being accompanied by large oscillations of the order of 250γ in H. The first of the accompanying oscillations in D was of the order of one degree but the second and third were smaller. After the last oscillation in V its trace rose steadily and reached about its normal position at 31d.7h. In H the disturbance was more prolonged. Other downward oscillations were recorded at 31d.3h. and about 31d.11½h. and there was a sharp moderate upward oscillation between 17h. and 18h.

APRIL (average character figure 0·53).—The month was fairly quiet, but there were three periods of moderate and one of rather more than moderate disturbance.

The month opened with six quiet or only slightly disturbed days. There was some activity on the 7th, the most marked part of which was recorded between 7d.20h. and 8d.1h. A rise to a blunt peak in V soon after 7d.21h. was accompanied by falls in H and D. These elements then remained more or less steady, while V decreased again, until towards midnight when a fairly rapid moderate fall in V coincided with marked single oscillations in H and D, the former upward and the latter downward. Conditions were about normal again by 8d.2h. The ranges are given in Table VI. Slight activity was recorded on the succeeding two days, increasing to moderate on the 10th when there were three noteworthy bays in D. Thereafter the traces became less variable and the period from 13th to 18th was mainly quiet.

Further activity was recorded on 18th–19th with a few isolated moderate and more or less simultaneous oscillations in all three elements. The first of these at about 18d.22h. comprised a moderate peak in H, a fairly sharp fall to a minimum in D and a less marked decrease in V, while the second between 19d.5h. and 19d.7h. gave decreases in H and V with an increase in D. Slight disturbance continued until the 21st after which conditions were mainly quiet until the 23rd.

The most notable disturbance began at about 6h. on the 24th. After a period of serrated trace H decreased markedly from 8h. to 9h. and at about 10h. began an oscillatory increase which was marked by peaks at about 14h. and soon after 17h. (the time of maximum). An oscillatory decrease then led to the minimum which occurred in a fairly sharp oscillation at about 25d.1h. Changes in D were not so marked. They comprised rather high oscillatory values until 24d.17h. and low values from 24d.18h. to about 25d.4h. The trace of V showed only small changes until 24d.13h. A fairly rapid rise then set in and was followed by relatively steady high values from 15h. until 18h. The decrease to the minimum continued until shortly after 25d.1h. and was fairly uniform. The disturbance recurred on a much smaller scale from 25th to 26th after which conditions were little disturbed until 28th–29th. The variations in this last period mainly comprised fairly high values in the afternoon of the 28th followed by slow decreases in H and D which led to bays in all three elements soon after midnight. A sunspot C.M.P. 24d.6h. may have been connected with this storm. More or less normal conditions were restored by 29d.5h., and thence to the end of the month quiet prevailed. The ranges are given in Table VI.

MAY (average character figure 0·55).– May was characterized by mainly quiet conditions during the first three weeks. The remainder of the month had more or less continuous activity but apart from a moderate disturbance on 21st–22nd this activity was of a minor order.

Of the first twenty days thirteen were 0 days, and apart from some moderate activity on the 16th and 17th, there was nothing of note until the most marked disturbance of the month set in at about 21d.12h. The disturbance had no very decided character. There was some moderate oscillation in H and D; H and V had maxima during the evening of 21st and reached their minima in the early morning of 22nd; while D had slightly high values until 21d.22h. and thereafter somewhat low values after a fairly sharp decrease. Conditions did not become really quiet during the rest of the month. There were, however, no important extended disturbances and the most outstanding features were peaks in H and V accompanied by a minimum in D at about 22d.21h., and less marked similar features at about 23d.19h.

JUNE (average character figure 0·50).– June was quiet until the 8th inclusive. The remainder of the month was unsettled, though disturbance was never much more than moderate, and there were some quiet days.

The month opened with a succession of eight quiet days. After slight activity on the 9th, the first disturbed period began at 10d.13h.15m. with a sudden commencement which was very marked in H and D. Subsequently all three elements rose to their maximum values in the afternoon and evening and there was fairly marked oscillation in H. A slow decrease followed with isolated oscillations about midnight, and there was some recurrence on the succeeding two days.

A second sudden commencement at 13d.3h.42m. introduced a disturbance which comprised chiefly serrated traces in H and D, and a general slow oscillation from maxima in the afternoon and evening of the 13th to minima in the early morning of the 14th. Somewhat disturbed conditions persisted until the 15th inclusive. The period, 16th–17th, was quiet, apart from small serrations in the traces, but during the night, 17th–18th, there was a moderate disturbance of which the most outstanding feature was a decrease in H at 17d.19h. from its maximum value through about 150γ in seven minutes followed by a recovery of about 75γ. Other details are indicated in Table VI. Conditions remained somewhat unsettled during the rest of the month though on some days activity was very slight.

JULY (average character figure 0·61).- July was notable for a major storm during a period of disturbance extending from 3rd to 10th inclusive. Apart from this period the month was fairly quiet.

The slight activity of the latter part of June continued during the first two days of July, and increased to moderate in the afternoon of 3rd. There followed a relatively quiet period during the night but at 4d.3h.42m. this was broken by the strongly marked sudden commencement of the preliminary phase of major disturbance. This phase included fairly large ranges during the night 4th–5th. The horizontal component began to increase at about 4d.14h. and reached a maximum at 4d.18h.30m. thereafter falling through 200γ by 5d.3h.10m., with a few moderate oscillations during the intervening period. The trace of D was somewhat oscillatory between 4d.21h. and 5d.4h. with a range of 42′ between the maximum at 5d.2h.25m. and the minimum at 5d.3h.17m. The changes of V were characteristic, comprising a moderate slow rise from about 4d.11h. to a maximum at 20h.13m., a fall until towards 2h., and then a marked bay in which the minimum was reached at 5d.2h.59m. – the range was 286γ. Hardly had recovery been made to about normal values when towards 5d.6h. the principal phase of the disturbance set in. A rapid and large decrease occurred in H which remained very low with large though not very rapid oscillations until nearly 12h. The minimum occurred in this period. At noon the value increased fairly sharply and became probably almost as much above normal as it had previously been below, but registration was poor and the maximum was not recorded. The over–all range much exceeded 1369γ – probably by 400γ or more. Towards 16h. there was again a sharp fall to about 200γ below normal. Subsequently, apart from a few oscillations through a range of some 400γ between 5d.21h. and 22h., the chief feature until 6d.12h. was that H remained about 100γ below normal. The incidence of disturbance in D and V was rather similar to that in H, with the greatest changes between 5d.6h. and 5d.16h. and three oscillations between 21h. and 22h. The maximum in D 13° 44·4′ occurred at 5d.21h.14m. and the minimum 11° 8·7′ at 5d.13h.10m., and the corresponding data for V were 45504γ at 5d.11h.6m. and 44822γ at 5d.7h.25m. Strong disturbance recurred between the afternoon of the 6th and early morning of the 7th when ranges of 395γ in H and 322γ in V were registered. There were two isolated peaks in H at about 7d.18h. and the daily recurrences did not cease until the 11th. A pair of sunspot groups C.M.P. 3d.8h. may have been connected with these disturbances.

The period from 11th to 15th was fairly quiet. This was followed by one of slight to moderate disturbance until the 21st, on which day an intensified morning minimum and evening maximum gave a range of 237γ in H but less marked variations in D and V. Activity then decrease and from the 26th to the end of the month conditions were quiet.

AUGUST (average character figure 0·65).- The month was moderately disturbed, with periods of activity from 2nd to 7th and 26th to 31st, but there were no ranges exceeding 650γ.

Following on the quiescent period of late July activity was noticeably renewed in the evening of August 1 and on the 2nd the range somewhat exceeded 150γ in H and V between minima in the morning and maxima in the late afternoon. Changes were generally smaller during the 3rd, although a marked peak in H between 17h. and 18h. increased the range of that element to slightly over 150γ again. The principal disturbance was introduced by a strongly marked sudden commencement at 4d.1h.29m. This was followed between 4h. and 5h. by a downward oscillation of H exceeding 200γ, at 5h. by a bay in V exceeding 120γ, and between 5h. and 6h. by a bay in D of the same order. Thereafter H decreased to an exceptionally low morning minimum between 11h. and 12h. before rising to the peaks which were the strongest feature of the disturbance. The highest peak was recorded at 4d.14h.28m. This was followed by an oscillatory decrease until 5d.0h.41m., the range being 631γ. Marked disturbance had ceased by about 5d.4h. The chief variation in V was rather like that in H with a rise to peaks during the afternoon and evening followed by a fall to a minimum which occurred soon after midnight. The range in V was 556γ. The over–all variation in D 48·6′ was less marked, though there were some fairly large oscillations. Slight or moderate disturbance continued to be recorded until August 8. A sunspot, C.M.P. 6d.1h. may have been connected with this storm.

From 8th to 25th conditions were mainly rather quiet, but a slight disturbance during the night of 25th–26th appears to have been the introductory phase of stronger disturbance which followed from 26th to 28th, as it was of the same general form. The main features of the disturbance in H from the 26th afternoon to the 27th morning were moderate oscillations superposed on a general range of somewhat over 180γ between a maximum at 26d.18h.29m. and a minimum at 27d.0h.40m. In V the general change was of typical form and more marked while the shorter period oscillations were less so. The maximum was recorded at 26d.18h.9m. and the minimum at 27d.1h.53m., the range being 297γ. The D trace showed a minimum at 26d.22h.10m. and there was a maximum shortly before 27d.2h. which was, however, below the value reached at about 26d.13h. in the course of the diurnal variation. The range in the disturbance was rather over 30′. After this disturbance of 26th–27th, D and V became more or less quiescent for a time but in H moderate oscillation persisted. These led to a marked intensification of the regular forenoon minimum in H between 10h. and 11h. and later to a peak maximum shortly before 23h. – the range being 223γ. The recurrence in V had its maximum at 27d.15h.42m. and minimum at 28d.0h.54m. with a range of about 140γ while the range in D was 43·5′ between the diurnal maximum at 27d.14h.24m. and a sharp minimum at 27d.22h.31m. Disturbance had become slight by 28d.4h. and remained so until 29th–30th on which night there was moderate oscillation, and ranges of 187γ in H and 162γ in V with maxima at about 17h. and minima about midnight.

The disturbance in D was not outstanding. On the last two days of the month activity was slight.

SEPTEMBER (average character figure 0·67).– On 18th–19th this month had one of the most intense storms which have been experienced. It much exceeded the limits of registration. There were three other periods of disturbance, none of them very noteworthy.

The first six days were quiet or only slightly disturbed. On the 7th there was a sudden commencement at 4h.41m., followed by moderate oscillations, and ranges of 104γ in H, 31·4′ in D but only 39γ in V. The following day was slightly disturbed, and shortly before midnight there was a noteworthy isolated peak in the H and D traces and a bay in V. Conditions were then quiet or slightly disturbed again until a small sudden commencement at 13d.7h.58m. introduced a period of increased activity which was almost continuous with the outstanding storm of 18th–19th. The changes during this period were, however, not large. In H on 13th–14th a double oscillation at about 15h. gave the maximum and minimum with a range of 191γ. In D and V the highest values were recorded in the afternoon and evening and the lowest towards midnight, the ranges being only 27·7′ in D and 99γ in V. The general oscillation was moderate in all three elements. On succeeding nights the disturbance was mainly little more than moderate though the ranges in D and V reached 30·7′ and 147γ respectively on the night of 15th–16th. There followed an interval of relative quiet until the early morning of the 18th. This was followed by a storm of exceptional intensity.

The storm may be said to have started at 18d.3h.37m. in a fairly sharp movement differing somewhat from a typical sudden commencement. Thereafter the value of H began to increase and at about 5h. rapid though not large oscillations set in. Between 5h. and 6h. H began to decrease and after 6h. the amplitude of the oscillations increased. The intense phase of the storm was reached towards 11h. and lasted through the night until about 19d.9h. The trace remained much serrated during the 19th and there was a large isolated downward oscillation between 19h. and 21h. The diurnal forenoon minimum of the 20th was unusually marked and followed by some moderate oscillation, and there was a moderate recurrence of activity from about 21d.3h. to 21d.17h. by which time the disturbance may be said to have terminated. Details of the ranges as far as they were decipherable are included in Table VI. The value of D decreased greatly like that of H to a first minimum between 11h. and 12h. It then oscillated largely about a more or less normal value until towards 20h. when there was a decided decrease with intensified oscillation. Very low values with strong oscillation persisted until about 19d.5h., but by 9h. the mean position of the still much serrated trace was more or less normal. Subsequently the only outstanding changes were a few fairly large oscillations accompanying that of H at about 19d.20h., and as

in H there was only moderate recurrence on the 21st. The V trace showed a period of slight decrease and small oscillations on the 18th from about 5h. to 7h. followed by somewhat increased oscillation from 7h. to 9h., a slow increase in value until towards 11h., and a sharper rise followed by increased oscillation about 11h. A first peak was recorded at about 13h.30m., an oscillatory decrease set in at about 15h. with a first marked minimum towards 16h., and there was a second marked minimum at 19h. A second decrease after 22h. led to much lower minima between 18d.22h. and 19d.1h., and there was a third decrease after 19d.1h. to the extreme values (beyond the limit of registration) at about 4h.30m. and 5h. After 5h. a fairly rapid and continuous recovery occurred, approximately normal values being reached towards noon. There was a small peak and a marked minima on the 19th at between 19h. and 21h. but thereafter only slight or moderate recurrence as in H and D. The period marked by this great storm was also the one of maximum sunspot area during the year. A group which just reached 2000 millionths of the sun's hemisphere had its C.M.P. at 16d.9m.

The twenty-four hours from 22d.9h. to 23d.9h. were quiet, but there was again moderate activity on 23rd–24th, which increased on 24th–25th during which period the ranges were 158γ in H, 41·1′ in D and 205γ in V. This was followed by isolated moderate oscillations in H and D later on the 25th between 19h. and 21h. Conditions were quiet for the next two days, and such disturbance as occurred on the last two days of the month was not outstanding.

OCTOBER (average character figure 0·52).– The month was fairly quiet, and during the two disturbances which occurred respectively on 11th–12th and 22nd–23rd the maximum range was 308γ.

No feature calling for remark occurred in the traces for the first nine days of the month. On the 10th however the trace became rather serrated, and this was followed on the 11th by moderate disturbance in all three elements. The maximum occurred in H at 11d.19h.10m. and the minimum at 11d.23h.0m., the corresponding times in D being 11d.13h.43m., 11d.23h.11m., and in V, 11d.17h.43m. and 11d.23h.26m. The ranges were 229γ, 42·2′ and 261γ respectively. Conditions were approximately normal again by 12d.5h., but there were moderate oscillations again from time to time during the succeeding four days.

A fairly quiet spell which set in on the 17th was interrupted on the 22nd. There was moderate activity during this day and some recurrence on the following two days, but the principal phase may be said to have been past by 23d.1h. The maximum of H was recorded at 22d.17h.42m. during a few rather sharp oscillations. These oscillations however did not quite reach the lowest value which occurred at 22d.22h.31m. The maximum and minimum in D and V accompanied more or less closely those in H, those of V being sharply marked. In D they occurred at 22d.17h.50m. and 22d.22h.51m., and in V at 22d.18h.7m., and 22d.22h.32m. The ranges were 189γ in H, 42·2′ in D and 308γ in V.

Quiet conditions alternated with slight activity from the 25th to 30th followed by the preliminaries of a major disturbance which had its extreme values on November 1. A sunspot, C.M.P. 29d.6h. may have been associated with this storm.

NOVEMBER (average character figure 0·63).– This month was moderately disturbed. There were three principal periods of disturbance, namely, October 31–November 1, November 6–7 and November 27–28. The greatest range, 451γ, occurred on November 1.

The disturbance of November 1 was introduced by a decided sudden commencement on October 31 at 3h.42m. Serrated traces and increased diurnal variation marked the period until about 31d.17h. at which time the larger oscillations set in.

In H the principal over-all feature was an oscillatory decrease from about normal at 31d.17h. to a low value at 1d.2h. followed by a recovery spread over the interval between this hour and the afternoon. The decrease led to a sharp minimum at 1d.1h.25m. A temporary recovery to about normal occurred from 3h. to 4h.30m. on the 1st, and this was succeeded by a serrated trace, with only one moderate oscillation, rising gradually to normal values at about 14h. The maximum value of H in the disturbance was recorded in a sharp moderate peak at 1d.14h.30m. and this was followed by some oscillation until the end of well marked disturbance which occurred at about 1d.21h. The range was 426γ. The general character of the D trace

was rather similar to that of H, but a peak at 31d.19h.14m. during the early oscillations somewhat overtopped subsequent peaks. The minimum occurred at 1d.0h.22m. and the range was 72·3′. In V a slow increase until 31d.17h. was then accentuated until the first peak was reached at 19h.39m. A somewhat unsteady decrease followed down to the minimum at 1d.2h.7m. and this was succeeded by an increase extending, as with H and D, to the early afternoon. It was after this that during a few hours of further moderate oscillation the highest value of the disturbance was recorded at 1d.16h.22m. The range was 451γ.

Three quiet days followed the opening disturbance of the month, the trace becoming irregular again in the mid-afternoon of the 5th. This irregularity was followed by moderate disturbance which may be said to have lasted from about 6d.10h. to about 7d.3h. The maximum and minimum in H occurred at 6d.18h.10m. and 6d.22h.11m. respectively, with a range of 191γ. In D there was a range of 47·5′ between the maximum at 6d.12h.59m. and the minimum at 6d.18h.3m., and in V a range of 158γ between a maximum and minimum at 6d.18h.3m. and 6d.22h.4m. respectively. Conditions did not settle down again for some days after this disturbance, the trace continuing to be interrupted by moderate oscillations from time to time until the 12th inclusive. The three days 13th–16th were however quiet. Activity was renewed at about 16d.20h., and on the 17th–18th was noteworthy more especially in the range of D which reached 39·3′ i.e. 189γ. The ranges in H and V were under 150γ. The period 19th–27th was quiet or only slightly disturbed apart from a few moderate oscillations on the night 22nd–23rd.

The last disturbance of the month was introduced by a well marked sudden commencement at 27d.3h.42m. following a specially quiet day on the 26th. The traces were serrated but without marked excursions until about 28d.1h. at which time moderate slow oscillation began. These continued until 11h. and were followed, after six hours of serrated traces, by a few marked oscillations which gave some of the extreme values of the disturbance. Conditions were about normal again by 28d.23h. The maximum and minimum occurred in H at 28d.18h.42m. and 28d.19h.27m., in D at 28d.6h.52m. and 28d.18h.41m. and in V at 28d.18h.39m. and 28d.5h.53m., the corresponding ranges being 240γ, 47·6′ and 215γ. The last two days of the month were quiet.

DECEMBER (average character figure 0·48).– There was a major disturbance (range 730γ) on the first day of December but apart from this the month was mainly quiet.

The storm at the beginning of the month was introduction by a sudden commencement at 1d.6h.0m. and rapid oscillations then continued until the large displacements set in during the early afternoon. A sharp rise to the highest peak in H occurred at about 14h.30m. and there was considerable oscillation during the following two hours in the course of which H decreased to some 80γ below normal. The gradual recovery lasted until the end of the storm at about 2d.21h. It was broken by a number of oscillations of which one was fairly large and gave the lowest value of H recorded during the storm. The maximum and minimum of H occurred at 1d.14h.52m. and 1d.21h.38m., the range being 730γ. The changes of D during the storm were of similar type to those of H. The maximum and minimum were recorded at 1d.15h.10m. and 1d.14h.59m. and the range was 61·2′. In V, after some slow decrease and increase between 6h. and 14h., a larger and more rapid increase led to the maximum at 1d.15h.6m. With minor oscillations the value remained near the maximum value until about 16h.30m. A sharp decrease of some 180γ was then succeeded by a slower fall to the minimum at 1d.23h.52m., and a gradual recovery to about normal by about 2d.8h. The range was 541γ. Following the storm there were some moderate oscillations each day until the 6th. Disturbance was then mainly slight until the 9th, though an isolated deviation at about 8d.23h. and its recurrence at about 9d.23h., especially in the H and V traces, seems worthy of remark. The period 10th–12th was quiet.

A spell of moderate activity began in the forenoon of the 13th, and in the course of 13th–15th an over-all range of 133γ in H was registered, with maximum and minimum at 15d.21h.33m. and 14d.14h.38m. Corresponding figures for D were 35·6′ with maximum at 13d.17h.20m. and minimum at 14d.21h.6m., and for V 154γ with maximum and minimum at 13d.18h.51m. and 14d.3h.23m. respectively.

On the 16th and 17th there was only slight disturbance apart from two or three moderate oscillations, and a sudden commencement at 18d.7h.3m. was followed by serrated traces with noticeably regular but not large oscillations. The remainder of the month was mainly quiet, the only outstanding feature being a deviation at about 23d.23h. remarkably like those which occurred at 23h. on the 8th and 9th.

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005.61 is printed 05.61

80 ESKDALEMUIR: h_b(height of barometer cistern above M.S.L.L = 237.3 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	87.0	74.5	80.1	76.0	72.1	73.9	68.4	63.8	66.5	72.0	67.3	69.0	93.1	88.9	90.6	98.0	95.4	96.4
2	05.0	87.0	96.5	82.5	73.5	76.1	65.6	*58.5*	*62.4*	68.3	65.5	67.4	99.9	93.1	96.6	*98.9*	97.6	*98.4*
3	10.0	05.0	08.3	96.4	82.5	90.2	68.2	63.9	66.1	69.2	*64.9*	*66.4*	*00.5*	97.4	*99.1*	98.4	96.8	97.5
4	*10.5*	06.9	*08.9*	*99.1*	91.4	*96.7*	70.3	63.5	66.8	84.3	69.2	76.0	98.5	95.5	96.9	97.2	91.7	94.0
5	06.9	99.9	03.4	91.4	68.6	78.2	70.1	64.1	67.2	94.9	83.9	89.7	96.7	93.4	94.8	92.1	87.2	89.5
6	99.9	97.0	98.1	76.7	68.6	73.3	73.2	63.9	67.5	02.9	94.9	98.8	94.9	93.5	94.0	87.3	82.7	84.5
7	02.1	98.4	00.0	73.4	64.6	67.9	80.2	73.0	76.8	05.7	02.8	*04.4*	96.1	94.3	95.0	83.0	81.0	81.8
8	08.6	02.1	04.9	73.5	66.8	68.9	87.0	78.5	82.6	05.5	01.5	03.3	95.9	94.5	95.3	81.6	77.7	79.6
9	10.4	07.3	08.8	75.9	70.3	74.1	87.7	85.8	86.8	06.7	00.5	03.2	94.9	91.5	93.0	79.5	*76.4*	*77.2*
10	07.3	00.2	03.0	84.4	74.0	78.4	92.5	83.7	87.9	*06.8*	97.0	02.6	95.4	91.3	92.7	87.2	79.0	82.6
11	00.4	97.6	99.2	85.9	75.7	82.2	94.7	92.3	93.5	97.0	88.8	91.5	96.3	95.2	95.7	88.4	87.1	87.9
12	99.5	92.8	96.9	75.7	66.1	69.4	94.9	93.0	94.1	88.8	86.3	87.6	96.0	91.1	94.2	88.2	85.1	86.6
13	92.9	76.8	85.7	66.2	65.1	65.5	94.1	91.5	92.4	87.2	77.9	81.9	91.8	89.2	90.5	90.4	87.9	89.6
14	78.8	75.1	76.5	65.4	56.5	59.7	98.1	94.1	95.8	77.9	73.8	75.4	92.1	90.4	91.2	89.3	82.0	85.5
15	78.3	76.3	77.2	64.2	56.1	*59.3*	00.2	98.0	99.1	82.7	76.2	81.0	91.2	86.4	89.1	94.9	80.7	87.7
16	77.2	73.0	74.6	64.4	60.3	62.3	00.3	97.1	98.7	81.6	75.2	78.6	86.5	81.7	83.1	95.8	92.9	94.7
17	76.8	73.2	75.2	64.1	59.3	62.3	99.8	98.2	99.1	76.3	74.0	74.9	82.7	76.7	79.6	94.0	92.1	93.1
18	76.2	64.0	70.8	63.6	62.1	62.8	00.0	97.9	98.9	77.1	73.6	75.8	76.7	74.3	75.5	94.9	91.0	92.4
19	71.8	62.9	67.2	63.0	60.9	61.6	*01.8*	99.3	*00.9*	74.5	71.8	73.0	83.6	76.5	79.2	95.6	93.9	94.9
20	71.3	59.3	65.2	62.0	60.1	61.0	01.6	90.4	97.3	82.5	74.4	77.3	89.0	83.6	87.0	95.4	92.8	94.1
21	59.3	50.7	55.1	69.6	61.9	65.3	90.4	83.4	86.8	90.3	82.5	87.0	88.0	78.8	82.8	93.0	86.5	89.2
22	58.2	*48.7*	*52.1*	69.7	65.3	67.3	89.1	80.7	84.3	96.1	90.1	92.1	80.3	66.2	75.2	86.9	85.1	86.0
23	67.2	58.2	62.9	69.0	66.3	67.9	88.6	81.5	85.8	01.7	96.1	98.6	66.2	*57.8*	*60.7*	90.9	83.5	86.4
24	72.0	67.2	69.4	79.6	68.1	72.6	88.5	82.0	85.5	02.7	99.6	01.4	69.2	64.4	67.1	90.8	88.6	89.6
25	82.0	72.0	76.8	82.6	79.6	81.7	82.0	75.2	80.0	99.7	93.0	95.7	69.2	66.4	67.7	88.6	86.1	87.1
26	90.5	82.0	87.2	82.9	72.8	80.6	75.2	71.0	73.4	93.0	87.5	89.5	67.4	62.9	64.8	95.0	87.5	91.0
27	90.0	84.7	87.2	72.8	57.9	61.7	72.2	70.3	71.2	87.9	83.6	85.2	77.3	64.5	69.5	97.5	95.0	96.6
28	86.4	84.1	85.1	64.1	*54.0*	60.1	77.8	71.5	74.2	89.3	84.1	85.7	84.4	77.3	81.5	97.6	95.5	96.6
29	87.3	85.7	86.5				82.8	77.8	81.3	91.9	89.3	91.0	84.0	81.2	82.2	97.9	95.3	96.8
30	85.7	78.1	81.6				81.8	73.7	77.8	91.7	88.1	89.5	89.2	83.2	86.3	95.3	91.6	93.1
31	78.1	75.1	76.8				74.4	72.0	73.3				95.5	89.1	92.6			
Mean	87.99	81.15	84.56	74.79	67.16	70.75	85.53	80.31	83.03	89.54	83.78	86.46	87.82	82.91	85.27	92.12	88.19	90.01

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*95.7*	93.2	*94.8*	95.6	89.0	93.0	97.3	93.4	95.2	97.0	91.2	94.0	*00.1*	94.1	97.3	05.8	94.5	99.1
2	95.5	90.0	93.1	95.4	89.8	92.2	99.6	92.6	96.1	00.2	96.3	98.0	99.8	98.3	99.0	*09.1*	05.8	*08.4*
3	90.0	85.3	87.1	89.8	82.2	86.6	99.7	96.6	98.1	00.8	99.3	00.0	99.2	97.4	98.0	08.9	03.2	05.4
4	92.6	88.9	91.0	82.2	67.2	72.9	96.7	94.7	95.6	99.9	98.5	99.3	97.9	96.5	97.3	04.6	97.8	02.2
5	92.6	89.4	91.4	78.7	65.0	69.7	95.1	90.2	92.3	99.9	97.5	98.8	96.5	85.7	92.8	97.8	91.3	95.8
6	89.7	87.1	87.9	82.6	78.7	81.4	96.9	90.7	92.9	97.5	94.2	95.6	85.7	75.3	79.8	91.3	63.4	73.2
7	87.3	86.1	86.9	82.7	81.4	82.2	01.1	96.8	99.1	96.2	94.7	95.4	89.3	81.7	85.5	68.5	*61.5*	*64.3*
8	91.0	86.4	88.9	82.4	79.5	80.4	01.5	99.9	00.6	94.7	90.5	93.4	91.1	85.5	89.4	72.9	68.5	71.0
9	90.7	87.9	89.1	84.0	76.4	81.6	00.1	98.1	99.3	90.5	77.0	84.9	85.5	64.8	74.3	75.8	69.8	72.0
10	88.2	81.9	84.5	79.4	75.5	77.7	98.1	88.2	92.7	77.0	73.7	74.6	65.4	*53.6*	*58.9*	75.8	66.0	72.9
11	83.5	80.6	82.1	75.5	71.5	72.7	92.0	87.0	89.0	98.9	74.7	87.5	68.5	*53.6*	62.4	76.3	65.9	71.9
12	81.3	79.4	80.4	79.9	73.3	76.9	96.0	91.7	93.6	01.1	98.8	99.9	77.7	66.9	70.6	75.2	66.1	68.4
13	82.6	80.8	81.5	78.5	63.3	68.3	97.1	91.8	95.7	98.8	86.1	93.2	79.7	77.7	78.7	81.0	69.3	76.2
14	82.0	77.8	80.1	77.6	70.0	75.7	98.1	88.2	92.4	86.1	80.6	82.9	91.5	79.7	87.2	75.2	63.2	70.9
15	77.8	73.0	*75.0*	77.3	65.2	72.6	02.4	98.1	00.8	87.0	74.1	84.0	91.5	80.7	88.2	77.8	73.0	74.4
16	87.7	*72.7*	79.6	68.4	*61.6*	*64.8*	03.3	02.0	02.7	81.4	68.1	75.4	80.7	60.3	70.3	82.6	77.7	79.9
17	90.7	87.0	89.2	70.8	67.8	68.5	03.8	02.2	03.0	81.1	67.5	73.6	73.5	60.1	65.4	97.9	82.6	92.7
18	87.0	82.4	84.1	80.1	70.8	75.3	*04.1*	03.0	*03.5*	76.8	*55.8*	*66.1*	85.6	73.5	81.2	99.6	97.6	98.4
19	85.3	84.1	84.7	80.6	78.8	79.8	03.7	00.8	02.3	78.7	74.0	76.5	85.5	82.0	83.8	05.2	96.9	00.9
20	86.4	84.6	85.4	79.0	77.4	78.0	01.9	00.4	01.2	91.0	75.0	84.3	82.1	76.1	78.9	05.2	00.8	03.8
21	85.9	83.9	84.8	79.2	76.4	78.0	01.5	00.1	00.8	01.5	91.0	96.1	79.6	71.9	75.0	00.9	95.5	97.4
22	85.7	83.6	84.4	82.3	76.3	79.0	00.4	94.9	96.9	04.1	00.2	01.4	79.6	71.3	74.8	01.9	95.8	98.3
23	87.8	84.3	86.0	82.2	79.0	80.6	95.4	93.1	94.4	06.4	03.9	05.0	79.0	72.7	76.5	01.9	95.6	98.1
24	87.6	85.0	86.3	86.5	81.1	84.8	93.1	88.1	90.1	*08.8*	06.4	*07.4*	79.3	73.8	77.7	95.6	92.6	94.0
25	85.5	81.7	83.3	85.5	74.2	78.1	89.4	87.9	88.8	08.4	00.5	05.2	92.8	73.2	86.1	04.0	95.1	99.8
26	85.2	82.3	83.5	79.9	72.7	75.5	87.9	83.0	85.3	04.1	00.3	02.6	91.4	78.2	83.6	03.9	88.8	96.4
27	86.4	85.2	85.7	82.1	70.1	78.0	85.9	82.4	83.8	02.0	78.7	90.8	82.4	74.7	76.6	96.2	90.6	94.4
28	85.7	81.5	83.1	70.1	67.7	69.0	82.5	79.6	80.3	88.2	78.5	84.1	99.2	82.4	92.0	00.5	95.6	98.3
29	81.9	78.4	79.7	77.4	67.5	72.3	82.7	*76.8*	*79.7*	93.1	84.9	88.8	99.6	98.7	*99.2*	05.0	00.3	02.1
30	83.7	78.8	80.4	92.0	77.4	84.0	91.2	82.3	85.1	93.1	83.2	87.1	99.6	95.1	98.0	05.5	03.4	04.5
31	89.2	83.6	85.8	*97.5*	92.0	*95.3*				94.1	84.0	88.3				03.7	00.0	02.3
Mean	87.17	83.45	85.16	81.78	74.80	78.22	96.62	92.49	94.38	94.79	86.43	90.78	86.98	77.85	82.61	93.73	86.07	89.92
									Annual	88.31	82.13	85.18						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

81 ESKDALEMUIR: h_b = 237·3 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	84·64	84·53	84·45	84·35	84·22	84·06	*84·05*	84·23	84·52	84·73	*84·91*	84·89	84·73	84·43	84·37	84·35	84·44	84·61	84·70	84·80	84·84	84·85	84·85	84·79	84·65	84·56
Feb.	*71·50*	71·25	71·11	70·75	70·41	70·34	*70·27*	70·36	70·46	70·66	70·68	70·79	70·74	70·61	70·42	70·38	70·45	70·59	70·81	71·01	71·13	71·24	71·20	71·15	71·10	70·75
Mar.	82·94	82·81	82·67	82·45	*82·35*	82·43	82·57	82·84	83·11	83·29	83·39	83·34	83·29	83·18	83·07	82·99	82·87	82·97	83·15	83·39	83·45	*83·49*	83·41	83·29	83·20	83·03
Apr.	86·55	86·49	86·37	86·23	86·08	*86·03*	86·15	86·30	86·47	86·56	86·51	86·47	86·35	86·29	86·18	86·11	86·09	86·14	86·31	86·59	86·97	87·12	87·13	*87·18*	87·12	86·46
May	85·60	85·52	85·43	85·32	85·25	85·23	85·32	85·41	85·49	85·42	85·41	85·26	85·09	85·04	84·94	84·79	*84·69*	84·73	84·87	85·09	85·33	85·67	85·77	85·80	*85·81*	85·27
June	90·37	90·16	90·01	89·92	89·83	89·89	90·04	90·18	90·25	90·19	90·14	90·04	90·02	89·96	89·85	89·73	89·69	*89·61*	89·66	89·78	89·95	90·24	90·33	*90·39*	90·30	90·01
July	85·54	85·43	85·26	85·04	85·05	85·03	85·13	85·18	85·28	85·28	85·22	85·16	85·11	85·04	85·04	85·00	84·85	*84·82*	84·89	85·03	85·19	85·44	*85·46*	85·44	85·40	85·16
Aug.	78·34	78·27	78·15	77·97	*77·87*	77·92	78·02	78·15	78·22	78·13	78·18	78·17	78·15	78·22	78·18	78·21	78·12	78·10	78·15	78·27	78·49	78·63	78·64	*78·66*	78·61	78·22
Sept.	94·86	94·69	94·47	94·22	94·11	*94·03*	94·11	94·26	94·40	94·51	94·45	94·36	94·32	94·22	94·12	94·07	94·03	94·11	94·28	94·57	94·70	94·77	*94·78*	94·77	94·66	94·38
Oct.	90·92	90·85	90·81	90·62	90·51	*90·40*	90·44	90·62	90·81	90·85	90·75	90·77	90·75	90·60	90·57	90·61	90·54	90·65	90·98	91·09	91·09	*91·21*	91·19	91·11	91·02	90·78
Nov.	82·67	82·56	82·60	82·46	82·33	82·31	82·31	82·47	82·73	82·73	82·76	82·70	82·46	82·34	*82·27*	82·33	82·46	82·62	82·80	82·95	82·99	*83·02*	82·91	82·83	82·70	82·61
Dec.	89·90	89·81	89·86	89·90	89·95	89·83	89·93	90·08	90·13	90·26	*90·48*	90·33	90·09	89·83	89·60	*89·56*	89·58	89·61	89·71	89·76	89·88	89·87	89·98	90·05	90·06	89·92
Annual	85·40	85·28	85·18	85·01	84·91	*84·87*	84·94	85·09	85·24	85·30	85·32	85·27	85·17	85·06	84·97	84·93	84·90	84·96	85·11	85·27	85·41	85·54	*85·55*	85·54	85·47	85·18

The initial 9 or 10 of the value is omitted i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

82 ESKDALEMUIR: h_b = 237·3 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	14·41	14·33	14·24	14·16	14·03	13·86	*13·83*	13·98	14·29	14·48	14·61	14·55	14·32	14·00	13·95	13·98	14·11	14·33	14·43	14·55	14·60	*14·61*	14·61	14·56	14·43	14·28
Feb.	*00·68*	00·44	00·33	99·98	99·62	99·54	99·43	99·52	99·63	99·79	99·68	99·73	99·65	99·48	99·28	*99·22*	99·33	99·55	99·81	00·05	00·20	00·34	00·32	00·30	00·27	99·82
Mar.	12·37	12·26	12·13	11·91	*11·80*	11·89	12·03	12·32	12·52	12·59	12·56	12·41	12·29	12·15	11·99	11·90	11·81	11·97	12·29	12·64	12·75	*12·85*	12·81	12·71	12·65	12·29
Apr.	15·90	15·86	15·74	15·59	15·43	15·40	15·48	15·55	15·64	15·64	15·51	15·41	15·23	15·15	15·01	*14·97*	14·98	15·07	15·32	15·72	16·19	16·41	16·45	*16·52*	16·48	15·60
May	14·67	14·61	14·53	14·43	14·39	14·37	14·37	14·32	14·26	14·07	13·97	13·72	13·47	13·40	13·26	13·11	*13·04*	13·13	13·38	13·69	14·08	14·53	14·70	14·81	*14·86*	14·01
June	*19·09*	18·90	18·80	18·71	18·63	18·62	18·63	18·65	18·63	18·47	18·34	18·17	18·11	18·00	17·85	17·68	17·67	*17·64*	17·74	17·97	18·29	18·73	18·93	19·04	19·00	18·38
July	*13·88*	13·82	13·67	13·47	13·49	13·44	13·41	13·34	13·32	13·23	13·10	12·97	12·89	12·79	12·79	12·74	*12·57*	12·60	12·72	12·95	13·22	13·59	13·67	13·71	13·73	13·22
Aug.	06·58	06·54	06·43	06·27	06·17	06·25	06·29	06·34	06·27	06·05	06·03	05·97	05·95	05·96	05·95	05·97	*05·89*	05·91	06·04	06·26	06·58	06·77	06·82	*06·88*	06·87	06·26
Sept.	*23·51*	23·34	23·11	22·87	22·75	22·66	22·75	22·86	22·89	22·89	22·72	22·57	22·49	22·38	22·25	22·21	*22·19*	22·33	22·63	23·06	23·27	23·37	23·41	23·41	23·31	22·84
Oct.	19·85	19·80	19·78	19·59	19·48	19·37	19·41	19·60	19·73	19·65	19·42	19·36	19·31	19·13	*19·09*	19·17	19·15	19·35	19·77	19·95	19·97	20·10	*20·13*	20·06	19·97	19·59
Nov.	11·70	11·59	11·65	11·50	11·36	11·35	11·35	11·52	11·79	11·72	11·67	11·54	11·25	11·10	*11·01*	11·11	11·34	11·58	11·79	11·95	12·03	*12·07*	11·95	11·86	11·74	11·57
Dec.	19·20	19·10	19·17	19·21	19·28	19·19	19·30	19·48	19·52	19·65	*19·81*	19·58	19·28	18·98	*18·75*	18·75	18·82	18·86	18·99	19·04	19·17	19·16	19·29	19·36	19·37	19·21
Annual	14·39	14·29	14·21	14·05	13·95	13·91	13·94	14·04	14·12	14·10	14·03	13·91	13·76	13·62	13·51	13·48	*13·48*	13·60	13·82	14·06	14·27	14·45	14·50	*14·51*	14·47	14·01

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

83 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	70·93	70·72	70·70	70·63	*70·55*	70·59	70·73	71·08	70·92	71·23	71·75	72·07	72·61	*72·78*	72·63	72·23	71·80	71·45	71·39	71·27	71·17	71·15	71·09	71·05	71·00	71·36
Feb.	72·68	72·56	72·24	*72·03*	72·16	72·21	72·56	72·60	72·50	72·99	74·05	74·64	74·95	75·28	75·35	*75·48*	75·11	74·49	74·08	73·78	73·64	73·34	73·09	72·91	72·74	73·53
Mar.	73·50	73·27	73·13	73·11	73·13	73·13	73·07	*73·07*	73·68	74·84	76·01	76·99	77·55	77·82	*78·36*	78·33	78·07	77·47	76·35	75·32	74·86	74·33	73·86	73·72	73·43	75·12
Apr.	75·20	75·00	75·03	74·99	75·02	*74·85*	75·26	75·97	76·86	77·69	78·52	79·04	79·53	79·73	*80·03*	79·61	79·40	79·04	78·28	77·27	76·47	75·90	75·63	75·46	75·31	77·08
May	77·43	77·23	77·18	77·01	*76·69*	76·71	77·54	78·91	80·28	81·38	82·31	83·20	83·87	84·06	84·43	*84·43*	84·09	83·51	82·58	81·77	80·37	79·45	78·74	78·05	77·65	80·47
June	81·86	81·66	81·15	81·06	*80·99*	81·64	83·01	84·15	85·10	86·04	86·83	87·44	87·89	88·34	88·71	*89·12*	88·75	88·34	87·75	86·78	85·40	83·98	82·94	82·50	82·02	85·06
July	84·05	83·53	83·25	83·02	*82·96*	83·27	84·54	85·69	86·84	87·69	88·34	89·08	89·39	89·61	89·68	89·73	*89·85*	89·25	88·74	87·99	86·86	85·84	85·22	84·67	84·10	86·63
Aug.	83·07	82·79	82·69	82·45	82·33	*82·15*	82·61	83·55	84·79	86·03	86·75	87·27	87·27	*87·82*	87·58	87·72	87·48	87·08	86·30	85·42	84·49	84·07	83·69	83·28	82·90	84·94
Sept.	83·67	83·60	83·62	*83·51*	83·60	83·54	83·54	83·96	84·99	86·09	87·11	87·68	88·10	88·21	*88·40*	88·27	88·10	87·48	86·34	85·01	84·40	84·09	83·89	83·66	83·60	85·45
Oct.	80·14	79·94	79·78	79·69	*79·60*	79·66	79·67	79·61	80·19	81·30	82·53	83·28	83·63	83·79	*83·91*	83·58	83·05	82·24	81·47	80·89	80·67	80·52	80·20	80·06	79·95	81·22
Nov.	77·00	76·99	76·87	76·92	76·95	76·83	76·83	*76·80*	76·82	77·42	78·17	78·80	79·23	79·43	*79·58*	79·25	78·40	77·68	77·49	77·34	77·05	76·91	77·00	77·03	76·97	77·62
Dec.	76·55	76·52	76·46	76·45	76·27	76·01	75·86	*75·72*	75·73	75·85	76·44	77·15	77·62	77·81	*77·83*	77·45	77·04	76·85	76·67	76·65	76·58	76·60	76·48	76·55	76·51	76·63
Annual	78·04	77·85	77·70	77·60	*77·55*	77·57	77·96	78·45	79·09	79·91	80·77	81·42	81·84	82·09	*82·24*	82·13	81·79	81·27	80·65	79·99	79·36	78·88	78·51	78·27	78·04	79·62

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

84 ESKDALEMUIR: Louvered hut: h_t(height of thermometer bulb above ground) = 0·9 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	71.8	69.0	70.6	75.4	71.6	73.3	77.3	73.4	75.0	75.2	71.5	*74.0*	87.1	72.9	80.2	92.2	78.8	85.9
2	72.3	61.5	68.5	74.3	69.1	71.5	78.3	73.1	75.2	75.7	74.1	74.6	86.9	73.7	79.2	83.6	76.7	*80.1*
3	66.5	59.5	62.7	74.7	68.5	71.6	77.6	72.6	75.2	79.1	74.5	76.1	86.0	69.7	79.0	86.3	76.8	80.4
4	64.3	*55.8*	*60.4*	75.3	63.8	69.8	76.4	69.8	73.7	78.3	74.4	76.4	87.3	*67.6*	78.1	90.3	78.0	83.4
5	68.8	56.1	62.4	74.8	69.7	71.5	74.8	67.8	71.9	79.0	72.2	74.7	83.6	71.6	78.4	90.4	76.7	83.3
6	71.9	*55.8*	65.5	77.0	74.0	75.2	75.0	70.7	73.1	76.3	71.6	74.2	82.8	71.3	77.2	89.8	76.3	83.1
7	75.1	70.5	72.5	79.5	74.2	77.6	75.8	71.3	74.0	77.9	73.1	75.1	80.8	74.3	77.2	87.1	76.9	83.2
8	75.9	73.7	75.0	*81.6*	76.6	*79.4*	77.6	73.8	75.8	76.4	73.0	74.5	80.3	74.2	77.0	92.6	80.1	85.1
9	74.1	69.0	72.2	80.2	75.2	77.7	76.1	74.7	75.3	79.0	68.1	74.8	83.3	72.4	78.4	85.6	80.1	82.7
10	77.2	72.9	75.2	79.7	75.6	76.9	78.3	73.4	75.5	81.2	*66.8*	75.1	84.8	71.8	79.1	84.8	75.0	80.7
11	77.3	75.7	*76.6*	76.9	72.9	75.1	76.0	73.8	75.0	82.7	76.2	79.8	86.3	72.0	80.4	86.0	75.7	80.8
12	77.9	74.2	75.7	78.7	74.3	76.6	78.0	71.0	74.3	84.3	80.6	*82.2*	84.9	78.0	81.7	88.3	*73.2*	82.0
13	*79.0*	75.1	76.5	76.3	73.6	74.7	83.0	71.4	76.2	82.6	79.2	80.8	86.3	76.1	81.6	89.1	75.5	83.2
14	75.7	70.7	73.3	77.9	72.6	75.8	86.5	72.4	77.8	83.4	76.7	79.7	80.2	70.6	*75.8*	86.5	82.0	84.7
15	72.4	67.4	70.3	78.4	72.0	75.6	87.6	71.2	78.1	82.8	74.0	78.3	82.5	69.9	76.4	88.7	81.6	84.8
16	70.7	64.3	67.7	77.7	71.4	74.6	*88.1*	69.5	78.1	82.5	77.3	79.3	86.1	74.6	79.8	89.2	81.4	85.3
17	72.4	61.3	68.0	75.0	72.6	73.7	82.1	70.3	75.2	79.3	76.6	78.2	84.4	75.3	80.2	85.9	83.6	84.5
18	71.4	60.1	65.9	74.0	71.4	72.6	76.5	69.8	74.3	83.9	76.2	79.2	87.8	75.7	82.1	92.4	78.6	86.9
19	72.0	69.1	70.6	71.9	70.5	71.3	82.2	70.8	76.6	83.1	76.3	78.6	89.9	77.9	83.8	92.8	74.9	85.0
20	72.0	69.2	71.0	72.3	70.4	71.6	81.4	66.9	75.2	83.3	73.9	78.6	89.1	76.0	82.4	96.3	79.3	88.9
21	74.7	72.0	73.4	74.3	67.0	72.4	83.9	73.3	*79.2*	*84.7*	73.6	79.5	83.4	75.1	80.5	*99.5*	85.1	*92.6*
22	77.5	73.4	75.2	72.2	62.6	*67.3*	78.3	70.4	74.6	84.5	72.7	77.9	83.7	79.9	81.9	93.8	87.0	90.2
23	77.7	73.4	74.6	74.1	64.7	69.5	80.8	70.2	75.4	80.6	70.1	76.0	83.6	80.0	82.0	90.1	81.0	86.4
24	76.0	73.8	74.9	74.7	62.6	70.7	75.7	68.7	73.2	82.3	69.0	76.5	84.4	75.3	80.3	90.5	80.4	85.7
25	74.9	73.2	74.0	75.0	63.0	69.5	80.5	72.7	75.7	83.9	73.0	77.8	84.6	74.2	80.1	88.4	77.8	84.5
26	73.4	72.4	73.0	74.0	*61.4*	69.6	78.3	73.2	75.2	83.5	70.2	76.2	83.5	79.2	81.2	87.1	79.9	84.9
27	72.9	72.0	72.4	79.2	71.9	76.1	80.3	75.2	77.7	81.3	69.9	74.8	87.2	80.1	82.2	87.8	78.4	84.2
28	74.7	72.6	73.6	80.5	74.6	77.7	76.0	71.9	74.2	80.8	68.9	75.7	90.6	80.2	84.5	94.3	84.8	89.3
29	75.0	72.9	74.1				76.8	64.8	72.2	79.2	71.9	76.4	88.3	79.3	82.5	93.4	86.0	89.8
30	73.4	71.6	72.3				76.3	*64.6*	*70.9*	80.7	75.2	77.2	89.0	78.4	82.7	96.1	86.8	90.4
31	74.2	73.0	73.8				78.3	72.9	75.1				*95.6*	82.2	*88.5*			
Mean	73.7	68.7	71.4	76.3	70.3	73.6	79.1	71.1	75.1	80.9	73.4	77.1	85.6	75.1	80.5	90.0	79.6	85.1

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	95.1	82.6	89.7	94.1	84.7	*89.7*	87.4	84.0	86.1	86.3	79.9	83.8	80.3	71.9	76.0	76.7	73.4	74.6
2	92.1	82.0	87.0	*95.4*	83.0	88.7	90.3	78.9	86.9	87.8	81.7	85.3	80.1	73.0	75.8	80.7	76.0	78.6
3	90.5	80.3	86.5	92.0	80.5	86.7	90.0	*76.0*	83.6	88.4	82.0	85.3	80.7	74.0	77.9	82.0	79.3	80.2
4	89.1	80.0	84.8	88.6	82.7	85.6	*93.8*	84.9	88.6	88.6	80.5	84.3	79.4	75.7	77.5	80.1	71.6	75.9
5	89.5	80.3	84.8	88.1	80.6	84.1	93.7	81.0	88.1	87.6	82.1	84.8	81.2	72.1	77.1	79.9	*72.0*	77.2
6	87.7	85.5	86.4	87.9	78.9	83.8	92.9	77.8	84.7	88.2	83.5	85.5	82.8	74.8	79.6	81.3	75.0	78.3
7	88.0	85.7	86.8	89.2	79.1	84.3	89.2	82.5	85.2	*90.4*	84.0	86.5	79.2	71.7	75.2	75.5	72.6	73.9
8	92.4	82.1	88.0	88.2	80.9	83.9	88.4	83.0	85.3	88.4	84.5	*86.7*	78.0	*67.2*	*71.8*	80.3	71.4	75.5
9	93.2	78.3	87.1	87.5	79.9	83.7	89.9	85.0	87.7	86.9	83.1	85.1	76.8	72.0	74.7	82.1	79.4	80.8
10	93.9	77.8	87.3	89.1	84.2	86.1	88.2	84.0	86.3	87.0	80.9	83.8	82.0	76.7	78.8	82.4	80.0	81.3
11	*96.9*	79.0	89.3	89.3	83.2	85.9	88.8	81.6	85.3	83.5	71.5	79.2	83.9	78.0	81.3	82.4	80.2	81.4
12	96.5	87.2	*91.0*	88.0	81.0	84.7	89.3	81.3	85.1	84.1	*69.0*	76.1	83.6	73.3	79.3	82.4	77.7	79.5
13	88.9	85.8	87.3	88.4	82.0	84.5	90.3	83.8	86.9	84.0	72.9	79.6	78.7	73.9	77.1	82.5	77.6	79.8
14	92.1	85.6	87.5	89.7	80.1	85.1	91.1	77.1	85.1	86.0	80.0	82.4	78.7	74.7	76.3	82.0	75.0	77.9
15	91.0	83.2	87.3	88.3	78.0	83.0	85.2	76.6	*81.9*	84.9	77.0	81.5	77.8	73.0	75.7	79.5	76.3	78.2
16	88.3	80.8	85.5	86.0	82.1	83.3	87.1	81.7	84.3	85.2	78.0	82.1	79.3	70.7	74.6	78.2	73.5	76.3
17	88.2	77.6	*83.7*	87.5	80.7	84.2	89.8	80.3	84.9	83.4	78.0	80.9	80.3	78.0	78.9	78.4	68.3	74.5
18	91.1	81.9	85.4	88.0	76.8	*82.8*	88.3	83.0	85.3	84.4	79.0	81.3	81.2	72.8	78.2	76.2	67.0	71.1
19	88.8	80.5	84.3	88.1	83.3	85.0	89.0	82.6	84.9	85.9	77.0	82.1	79.8	67.9	73.2	80.0	69.9	76.1
20	88.2	81.0	84.7	88.3	81.6	84.6	86.7	82.5	84.4	84.5	75.7	81.0	81.2	71.5	77.2	79.7	70.6	76.6
21	88.1	82.1	84.3	87.5	81.0	84.5	90.3	79.4	84.3	84.0	74.8	79.0	82.8	76.9	80.6	81.5	78.9	80.1
22	90.6	79.7	85.8	90.3	79.4	84.7	86.4	79.2	82.9	84.2	74.8	79.1	83.8	75.7	80.3	80.9	75.9	79.0
23	91.2	*75.8*	84.7	89.0	78.8	83.7	90.5	78.6	84.1	82.6	72.6	77.6	81.8	75.1	79.2	82.4	76.1	80.3
24	93.0	80.1	86.5	91.1	*75.8*	83.8	91.6	79.8	85.6	81.7	75.0	78.1	*84.8*	80.9	*83.3*	*82.6*	81.0	*82.0*
25	94.8	81.3	88.0	87.4	79.1	85.0	88.8	84.2	87.5	82.1	70.0	77.5	83.5	72.3	77.7	81.0	70.8	75.9
26	93.1	82.2	88.9	89.1	83.5	85.7	90.1	85.9	87.4	80.7	74.4	77.9	81.7	75.8	80.0	79.7	70.0	74.4
27	95.2	77.2	87.8	86.2	81.8	84.7	93.0	85.9	*89.6*	85.3	75.5	81.8	83.0	78.2	81.4	74.2	68.3	71.4
28	87.7	80.1	85.1	88.0	83.4	85.2	89.5	82.2	86.9	82.5	74.7	78.6	79.0	71.3	75.4	73.3	*66.5*	*69.4*
29	88.3	82.6	85.6	89.5	83.4	85.5	85.8	78.4	82.8	78.3	73.0	*75.5*	80.0	75.0	78.0	78.5	69.4	72.9
30	91.0	83.7	86.5	91.7	82.0	86.7	85.5	80.1	82.0	81.7	74.5	78.2	77.9	74.9	76.3	73.4	68.0	70.8
31	91.4	82.6	87.9	90.8	76.0	84.2				80.7	74.3	77.3				75.0	69.4	71.5
Mean	91.2	81.4	86.6	89.1	80.9	84.9	89.4	81.4	85.5	84.8	77.2	81.2	80.7	74.0	77.6	79.5	73.6	76.6
									Annual	83.39	75.59	79.59						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

85 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	86·9	4·4	82·7	5·2	87·8	6·2	85·3	5·6	65·7	6·7	*63·2*	9·4	70·8	13·5	83·2	*15·8*	*97·0*	14·6	95·3	12·3	85·5	6·5	90·7	6·2
2	88·4	3·9	75·4	4·1	93·4	6·7	90·5	6·2	75·9	7·2	80·3	8·1	91·5	14·6	87·1	15·5	86·7	13·8	88·9	12·7	90·1	6·7	*98·5*	9·0
3	86·4	2·4	*73·4*	4·1	*95·2*	6·8	93·0	7·1	57·0	*5·3*	83·3	8·6	82·0	12·7	83·9	13·2	90·9	11·6	88·9	12·7	86·9	7·5	88·3	9·0
4	92·2	2·2	85·3	4·1	90·3	5·8	93·3	7·3	70·6	6·2	79·7	10·1	*69·5*	*9·6*	87·8	12·8	87·9	15·6	83·9	11·2	86·3	7·3	92·9	7·0
5	95·5	2·6	92·8	5·1	93·8	5·3	75·4	5·2	66·6	6·0	75·9	9·5	86·0	11·9	76·6	10·1	83·1	14·3	91·9	12·7	93·1	7·6	95·9	7·9
6	93·5	3·1	87·7	6·3	89·7	5·5	72·8	4·9	68·6	5·7	70·4	8·7	96·0	14·8	*67·0*	*8·7*	89·1	12·3	94·1	13·6	79·6	7·8	85·2	7·6
7	84·7	5·0	83·4	7·1	82·3	5·4	62·5	*4·4*	66·4	5·5	79·3	9·9	*97·0*	15·3	70·2	9·4	*79·7*	11·3	92·5	14·2	72·3	5·2	*68·7*	4·5
8	85·0	6·0	96·4	*9·3*	93·0	6·9	70·0	4·8	72·7	5·9	79·9	11·3	81·7	13·9	84·2	11·0	90·5	12·9	96·1	*15·1*	*71·1*	*4·0*	78·9	5·8
9	79·7	4·6	85·1	7·3	87·5	6·3	71·1	4·9	75·5	6·8	86·2	10·4	71·7	11·5	85·5	11·0	83·7	14·0	*96·2*	13·6	73·7	5·1	90·9	9·6
10	83·5	6·0	84·7	6·8	90·5	6·6	76·2	5·4	74·1	7·0	75·7	8·0	76·1	12·4	86·0	13·0	84·8	13·0	84·5	10·9	81·5	7·5	93·8	*10·3*
11	85·5	6·8	94·0	6·7	85·5	6·0	*95·5*	9·4	75·0	7·7	76·4	8·1	79·3	14·7	88·2	13·1	83·0	11·9	79·4	7·5	85·5	9·3	88·8	9·8
12	80·7	6·0	89·3	7·1	80·0	5·4	89·6	*10·4*	77·6	8·7	67·2	*7·7*	88·5	*18·3*	76·7	10·5	81·8	11·5	83·4	6·4	92·1	8·8	81·4	7·9
13	83·0	6·5	93·2	6·4	68·8	5·3	86·1	9·1	74·9	8·4	65·8	8·2	95·6	15·6	88·3	12·0	80·8	12·8	95·5	9·3	94·2	7·7	90·0	8·9
14	80·5	5·0	90·3	6·7	*48·9*	4·2	78·2	7·7	74·7	5·6	94·7	13·0	93·7	15·5	75·0	10·6	82·9	11·7	81·7	9·6	95·7	7·4	87·6	7·6
15	77·4	3·9	92·5	6·8	62·9	5·5	75·9	6·8	63·4	4·9	80·0	11·1	90·7	14·8	89·9	11·0	80·6	*9·2*	88·7	9·8	81·2	6·0	80·7	7·1
16	*70·6*	2·9	90·0	6·2	67·4	5·9	92·5	8·8	77·1	7·7	80·9	11·6	82·1	11·9	90·0	11·3	89·3	12·0	80·0	9·2	83·2	5·7	86·7	6·7
17	72·3	3·1	89·7	5·8	85·1	6·1	*95·5*	8·5	81·4	8·3	*98·0*	13·3	87·0	11·2	94·0	12·5	80·3	11·2	87·5	9·3	93·9	8·7	82·6	5·6
18	95·0	3·4	86·7	5·1	88·8	6·0	83·6	7·9	69·6	8·0	79·8	12·7	90·3	13·0	91·7	11·1	84·9	12·1	79·3	8·7	80·9	7·2	97·7	5·2
19	86·3	4·4	91·5	4·9	77·9	6·2	88·7	8·1	*56·5*	7·3	73·3	10·3	72·9	9·8	93·5	13·1	87·7	12·2	93·3	10·8	90·1	5·6	94·5	7·2
20	76·1	4·0	82·3	4·5	78·2	5·6	80·5	7·3	73·5	8·7	68·8	12·4	80·7	11·1	86·6	11·8	84·5	11·4	75·4	8·1	92·5	7·6	96·1	7·6
21	91·2	5·7	76·5	4·5	78·5	7·4	85·2	8·2	89·1	9·3	73·5	*16·8*	83·9	11·2	85·2	11·6	82·0	11·0	79·2	7·4	93·2	9·7	91·0	9·2
22	93·3	6·7	96·9	3·9	78·7	5·4	86·2	7·5	93·5	10·7	85·5	*16·8*	79·2	11·7	78·2	10·7	85·1	10·4	73·0	6·9	87·4	8·9	82·5	7·7
23	93·0	6·4	87·0	4·1	67·6	4·9	69·2	5·2	*93·9*	*10·8*	87·8	13·5	80·9	11·1	87·0	11·2	86·0	11·4	82·2	7·0	*95·8*	9·1	88·6	9·1
24	*96·5*	*6·8*	82·5	4·3	90·8	5·6	*60·7*	4·8	87·2	8·9	74·7	11·0	79·9	12·4	86·1	11·1	89·1	13·0	85·8	7·1	93·6	*11·7*	83·3	9·6
25	90·5	5·9	77·0	*3·6*	86·7	6·4	67·0	5·8	80·3	8·1	90·3	12·3	86·4	14·7	*94·2*	13·2	96·1	*16·0*	83·4	7·0	84·3	7·2	73·5	5·5
26	82·2	5·0	82·0	3·9	92·1	6·6	70·3	5·4	90·9	9·9	84·7	11·8	80·7	14·6	80·4	11·8	93·7	15·4	65·0	5·6	91·6	9·2	86·8	5·9
27	81·3	4·8	*97·0*	7·4	92·2	*7·9*	72·8	5·1	82·7	9·6	84·0	11·2	75·6	12·7	91·0	12·5	86·7	16·4	71·0	8·0	86·5	9·5	84·8	4·6
28	87·0	5·5	86·8	7·4	82·0	5·5	74·5	5·5	76·5	10·4	82·6	15·3	95·0	13·4	89·5	12·7	84·4	13·4	62·6	5·7	93·1	6·8	88·3	*4·1*
29	87·2	5·8			58·3	*3·4*	80·3	6·3	87·5	10·4	84·2	16·1	85·5	12·5	88·0	12·8	88·5	10·7	*58·6*	*4·3*	91·1	7·9	92·5	5·6
30	88·6	5·1			77·3	4·1	82·5	6·8	85·5	10·3	82·8	16·5	83·8	13·0	79·0	12·4	89·1	10·2	79·3	7·0	87·6	6·8	97·4	5·1
31	94·7	6·1			85·2	6·1			58·9	10·4			83·2	14·1	87·8	11·7			84·3	7·0			91·3	5·0
Mean*	86·1	4·8	86·9	5·7	81·8	5·6	80·2	6·7	75·6	7·9	79·6	11·5	83·8	13·1	84·9	11·9	86·5	12·6	83·3	9·4	86·8	7·5	88·3	7·2

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

86 ESKDALEMUIR: h_t = 0·9 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	86·9	87·3	87·3	87·6	87·8	88·2	*88·2*	87·3	87·2	87·0	85·5	84·3	82·9	*80·7*	81·1	82·2	84·3	85·7	86·5	87·7	87·9	87·8	87·8	87·1	87·1	86·1
Feb.	89·5	89·5	90·4	90·6	90·2	*90·9*	90·7	90·4	90·4	89·2	85·0	83·5	83·0	81·6	81·9	*80·5*	81·3	84·1	85·8	87·6	86·6	87·6	87·1	87·8	88·9	86·9
Mar.	87·5	87·8	88·5	88·3	88·5	88·7	89·5	*89·8*	88·9	85·2	79·8	75·6	74·0	73·3	70·3	*69·5*	70·8	73·1	76·2	79·2	81·4	84·4	86·0	87·3	87·9	81·8
Apr.	87·4	88·5	89·2	89·6	*89·7*	89·3	89·0	87·0	81·7	77·9	72·9	71·9	69·1	68·3	*66·9*	69·4	69·3	69·8	75·0	79·8	83·5	85·2	86·6	87·1	87·4	80·2
May	87·6	87·7	88·3	*89·6*	89·5	89·3	86·5	82·5	76·2	71·0	68·5	64·9	60·5	61·1	59·1	*58·5*	60·9	64·1	68·9	71·6	77·5	81·7	83·5	85·1	87·0	75·6
June	90·3	91·4	*92·9*	92·6	92·3	90·5	85·2	81·2	77·7	74·5	71·5	69·8	68·0	68·1	67·8	*66·1*	67·9	69·7	71·4	75·2	81·1	86·1	89·8	89·9	90·7	79·6
July	92·5	93·7	94·5	95·0	*95·6*	94·0	91·6	88·5	84·5	81·4	76·8	74·1	72·3	74·2	73·6	73·1	*71·2*	74·3	76·9	80·6	84·5	87·7	89·4	90·8	92·4	83·8
Aug.	91·0	92·0	92·3	*93·1*	92·6	92·9	91·7	90·3	87·2	82·7	80·7	77·1	76·4	74·4	75·3	*73·3*	76·5	77·8	80·1	84·7	87·2	88·4	89·3	90·3	91·3	84·9
Sept.	91·9	*93·4*	92·9	93·0	93·2	93·1	92·7	92·3	88·7	85·8	81·7	79·2	76·3	76·4	*76·1*	76·4	77·6	81·1	84·2	88·5	88·9	90·2	90·3	91·6	91·4	86·5
Oct.	86·2	88·1	88·7	88·7	*89·1*	88·3	88·8	88·8	85·8	83·5	78·8	76·6	73·7	73·3	*72·1*	73·8	75·9	80·2	84·2	85·4	86·2	86·8	87·0	87·6	86·6	83·2
Nov.	89·4	88·4	88·6	89·0	88·7	88·3	89·0	88·0	88·3	87·0	86·3	85·0	82·7	80·5	*80·3*	82·3	84·7	87·3	86·9	88·4	88·0	89·0	87·9	88·8	*89·4*	86·8
Dec.	89·7	89·6	88·8	88·6	88·7	89·0	88·0	88·5	89·0	89·2	88·3	87·2	84·4	84·2	*84·1*	86·0	88·3	89·1	89·4	89·5	*89·9*	89·5	90·2	89·6	89·7	88·3
Annual	89·1	89·8	90·2	90·5	*90·5*	90·2	89·2	87·9	85·4	82·8	79·6	77·4	75·2	74·6	*74·0*	74·2	75·7	78·0	80·4	83·1	85·2	87·0	87·9	88·6	89·2	83·6

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

87 ESKDALEMUIR: h_t = 0·9 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	4·6	4·5	4·5	4·5	*4·5*	4·5	4·6	4·6	4·6	4·7	4·8	4·8	*4·9*	4·9	4·8	4·8	4·7	4·7	4·7	4·7	4·7	4·7	4·7	4·6	4·6	4·7
Feb.	5·3	5·3	5·2	*5·2*	5·2	5·2	5·4	5·4	5·3	5·4	5·6	5·7	5·8	5·8	*5·9*	5·9	5·8	5·7	5·7	5·7	5·5	5·5	5·4	5·3	5·3	5·5
Mar.	5·6	5·5	5·5	*5·4*	5·4	5·5	5·5	5·5	5·7	5·9	6·0	6·1	6·3	*6·3*	6·3	6·2	6·2	6·1	5·9	5·7	5·7	5·7	5·6	5·6	5·5	5·8
Apr.	6·3	6·2	6·3	6·3	6·3	*6·2*	6·4	6·6	6·6	6·7	6·6	6·7	6·7	6·7	6·7	*6·8*	6·7	6·5	6·7	6·6	6·5	6·4	6·4	6·4	6·3	6·5
May	7·3	7·3	7·3	7·3	7·1	*7·1*	7·3	7·7	7·8	7·8	8·0	8·1	7·9	8·1	8·0	7·9	8·0	8·1	*8·2*	8·1	8·0	7·9	7·7	7·5	7·4	7·7
June	10·3	10·3	10·1	10·0	*9·9*	10·1	10·5	10·8	11·0	11·2	11·3	11·5	11·5	11·9	12·1	12·1	12·1	*12·2*	12·0	11·8	11·7	11·3	11·0	10·7	10·4	11·1
July	12·2	11·9	11·8	*11·7*	11·7	11·8	12·5	13·0	13·4	13·6	13·4	13·6	13·5	*14·0*	14·0	13·9	13·7	13·7	13·8	13·7	13·4	13·0	12·7	12·5	12·2	13·0
Aug.	11·2	11·1	11·1	11·0	10·9	*10·8*	11·0	11·5	12·0	12·4	*12·7*	12·5	12·4	12·5	12·5	12·3	12·6	12·5	12·3	12·2	11·8	11·6	11·5	11·3	11·1	11·8
Sept.	11·8	11·9	11·9	11·8	11·9	11·9	11·8	12·1	12·4	12·9	13·2	13·2	13·1	13·2	13·3	13·3	13·3	*13·4*	12·9	12·4	12·0	11·9	11·8	11·8	*11·7*	12·5
Oct.	8·7	8·8	8·8	8·7	8·7	8·6	8·7	8·7	8·7	9·1	9·4	*9·6*	9·4	9·5	9·4	9·4	9·4	9·4	9·3	9·1	9·0	9·0	8·8	8·8	*8·6*	9·0
Nov.	7·3	7·2	7·1	7·2	7·3	7·1	7·2	*7·1*	7·1	7·3	7·6	7·8	*7·9*	7·8	7·8	7·8	7·6	7·5	7·3	7·4	7·2	7·2	7·1	7·2	7·3	7·4
Dec.	7·1	7·1	6·9	6·9	6·9	6·7	6·6	*6·6*	6·6	6·7	6·9	7·2	7·2	7·3	*7·3*	7·2	7·2	7·2	7·1	7·1	7·1	7·1	7·1	7·1	7·0	7·0
Annual	7·8	7·7	7·7	7·7	7·7	*7·6*	7·8	7·9	8·0	8·2	8·4	8·6	8·5	8·6	*8·6*	8·6	8·6	8·5	8·4	8·3	8·2	8·1	8·0	7·9	7·8	8·2

* Mean of values, 1,2,.....23, ½(0+24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

88 ESKDALEMUIR: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 242·0 m. + 0·4 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	6·7	9·7	...	1·2	2·5	...	5·3	3·5	5	4·5	8·6	...	...	...	...	...	...	...
2	1·7	1·5	...	0·3	1·0	...	10·3	8·5	...	1·6	2·8	...	...	...	...	...	...	...
3	...	...	...	...	...	...	9·4	4·7	9	2·6	2·6	9	...	...	...	...	...	...
4	...	...	...	...	...	...	3·4	3·9	...	3·1	4·2	6	...	...	...	0·1	0·1	2
5	...	...	...	*18·3*	17·1	...	7·7	3·1	...	0·3	0·2	...	...	...	...	...	...	...
6	...	...	...	1·1	1·1	2	1·5	3·0	...	0·2	0·2	...	...	...	...	...	...	...
7	0·1	...	...	9·9	5·9	9	...	...	...	...	...	...	...	...	...	...	...	...
8	0·8	1·1	...	11·4	14·9	8	3·8	7·9	...	...	...	...	...	...	...	...	...	...
9	...	...	...	0·1	0·3	1	0·6	0·8	...	...	...	...	0·4	0·6	...	...	...	...
10	0·3	1·3	...	3·2	2·6	20	0·3	...	...	...	...	...	0·2	0·9	...	...	...	...
11	0·3	...	...	0·1	...	...	...	...	...	3·5	5·1	...	...	...	...	...	...	...
12	0·2	0·2	...	6·0	9·3	3	...	...	...	0·2	...	...	...	...	...	...	...	...
13	0·2	0·5	...	5·0	8·3	2	...	...	...	1·5	0·7	17	0·4	1·7	...	0·2	0·3	1
14	1·6	3·1	...	3·7	9·6	2	...	...	...	3·2	3·1	8	5·9	5·8	...	7·8	9·3	9
15	...	...	...	10·9	11·6	6	...	...	...	0·6	1·5	...	0·4	0·9	2	1·6	4·0	3
16	...	...	...	0·2	0·7	...	...	...	...	7·3	7·2	20	1·9	2·3	6	...	...	...
17	...	...	...	1·2	3·4	...	...	...	...	*32·1*	*24·0*	15	0·1	0·2	...	5·1	*15·6*	1
18	0·2	...	...	2·3	8·3	...	0·1	...	...	2·4	4·7	2	0·3	0·4	2	1·9	4·8	4
19	0·3	1·5	...	5·0	*24·0*	...	...	...	...	3·6	3·8	6	...	...	...	...	...	...
20	1·7	3·9	...	1·5	8·2	...	...	...	...	2·9	1·7	24	0·9	2·6	...	...	...	...
21	7·6	6·9	*3*	...	...	...	1·3	2·6	...	7·4	2·4	*60*	10·3	7·6	41	13·8	0·8	135
22	*9·4*	*9·9*	2	...	...	...	0·7	0·9	...	...	...	...	11·5	11·6	4	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	*38·3*	*19·5*	11	*17·3*	1·6	*181*
24	2·7	4·5	1	0·2	0·3	...	2·1	5·3	...	...	...	...	7·2	5·9	18	...	...	...
25	3·7	9·8	2	...	...	...	15·7	13·7	2	...	...	...	0·7	0·4	28	1·1	1·2	3
26	0·6	1·3	...	0·1	0·4	...	*24·4*	*17·3*	*19*	...	...	...	5·7	6·5	6	0·9	0·8	8
27	0·6	2·4	...	12·9	9·8	*25*	8·7	6·2	11	0·2	0·5	...	8·6	3·4	*47*	0·4	2·8	...
28	3·8	9·3	...	6·7	6·2	24	0·2	...	...	...	...	...	...	...	...	0·1	0·5	...
29	...	...	...				0·1	0·3	...	0·3	0·5	...	2·6	2·5	7	...	...	...
30	...	...	...				4·9	4·9	...	...	...	...	...	...	...	...	...	...
31	...	...	...				13·4	11·8	...				...	...	...			
Total	42·5	66·9	–	101·3	145·5	–	113·9	98·4	–	77·5	73·8	–	95·4	72·8	–	50·3	41·8	–

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	6·0	11·7	12	1·7	5·3	...	...	...	...	0·7	2·5	...
2	0·2	0·5	...	...	...	...	2·4	3·8	19	...	...	...	1·8	2·7	7	0·1	...	...
3	7·3	8·3	7	...	...	...	...	...	...	...	...	...	7·2	10·4	9	...	...	...
4	...	...	...	5·2	7·4	8	0·1	0·9	...	...	...	...	0·4	0·9	...	1·7	3·6	...
5	3·2	6·4	7	2·0	3·4	10	...	...	...	1·2	2·9	1	1·3	1·3	15	1·1	2·0	...
6	9·6	8·1	9	...	...	...	...	...	...	6·9	5·0	32	1·6	3·4	...	*16·9*	5·9	*32*
7	23 0	*19 8*	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	0·1	0·3	...	0·2	0·5	2	0·3	0·3	7	20·8	14·4	*73*	...	...	...	1·4	3·8	...
9	...	...	...	1·6	2·3	8	...	...	...	20·4	*16·7*	13	1·4	2·5	...	0·3	0·3	...
10	...	...	...	3·0	2·5	11	0·2	0·4	...	15·1	7·4	62	7·4	5·2	11	8·7	5·2	12
11	...	...	...	18·0	9·3	38	0·2	0·5	...	0·1	0·2	...	2·3	2·5	1	7·9	5·4	26
12	...	...	...	1·6	2·7	2	...	...	...	...	...	...	4·3	5·1	17	6·8	3·4	27
13	0·6	0·7	1	21·9	*13·3*	34	...	...	...	11·7	11·5	7	19·0	18·0	16	15·5	*7·5*	10
14	0·6	1·5	...	...	...	...	...	...	...	1·6	1·7	25	0·2	0·6	...	14·4	5·7	25
15	8·2	3·3	11	13·6	6·5	17	...	...	...	10·6	5·6	9	...	...	...	...	...	...
16	4·8	3·7	7	13·0	10·3	20	...	...	...	*23·9*	5·6	>60	1·8	4·0	2	0·6	0·7	1
17	1·4	3·6	6	8·4	5·7	74	...	...	...	17·5	5·5	63	3·9	5·0	5	...	...	...
18	13·3	10·4	59	6·7	4·8	31	...	...	...	11·6	5·4	9	1·0	1·7	...	0·1	...	...
19	0·1	0·1	1	5·3	3·0	59	...	...	...	15·9	12·8	53	...	...	...	0·7	0·6	...
20	6·1	3·5	16	5·5	3·4	23	...	...	...	1·4	2·5	1	3·9	5·1	6	1·2	4·8	...
21	1·8	1·7	5	0·8	0·4	26	...	...	...	0·3	0·1	3	18·3	8·1	*49*	1·8	4·3	...
22	...	...	...	0·2	0·6	1	...	...	...	...	...	...	1·3	2·4	(2)	...	...	...
23	...	...	...	0·2	0·2	1	...	...	...	...	...	...	5·0	6·3	(3)	1·2	3·8	...
24	...	...	...	...	...	...	0·1	...	...	0·1	...	...	*20·8*	*18·6*	(20)	1·7	2·8	...
25	*25·4*	3·5	*98*	14·0	5·8	*117*	*16·3*	11·6	19	...	...	...	1·9	1·1	(12)	...	...	...
26	...	...	...	2·4	2·2	24	6·4	*13·6*	10	...	...	...	15·8	13·7	10	3·0	3·6	4
27	...	...	...	*36·5*	10·3	47	7·5	5·9	11	...	...	...	11·5	6·9	11	0·1	0·3	...
28	0·9	3·5	6	15·6	7·5	79	11·9	6·6	33	0·5	0·8	...	...	...	...	...	...	...
29	6·3	1·8	55	5·9	4·1	57	2·0	1·4	11	...	...	...	0·5	0·7	...	...	...	...
30	5·4	2·6	31	...	...	...	13·0	7·9	*36*	2·1	4·6	3	0·7	1·4	4	...	...	...
31	0·2	0·1	2	...	...	...				0·8	2·5	...				...	...	...
Total	118·5	83·4	–	181·6	106·2	–	66·4	64·6	–	163·7	110·5	–	133·3	127·6	–	85·9	66·2	–

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

89 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	3·6	*4·1*	1·6	1·4	2·2	1·9	0·6	0·7	0·4	0·6	1·0	1·4	2·1	3·7	1·6	0·2	1·0	1·5	0·8	1·8	1·8	1·9	3·7	2·9	42·5
Feb.	*6·9*	5·4	5·6	5·5	4·0	3·8	4·2	6·1	6·0	4·3	4·0	4·1	3·4	3·4	6·5	3·5	3·9	3·3	4·5	3·6	2·7	1·8	1·6	3·2	101·3
Mar.	5·6	5·6	5·3	4·6	2·0	1·3	2·7	1·0	4·5	3·5	3·3	7·1	8·1	6·2	2·7	2·3	4·4	6·4	5·8	*9·9*	4·8	5·0	4·7	7·1	113·9
Apr.	2·3	4·0	2·3	1·6	3·0	3·6	4·4	3·1	2·9	3·2	2·6	2·8	7·0	5·0	2·2	1·4	2·9	*7·6*	2·3	2·7	1·5	4·2	2·6	2·3	77·5
May	6·0	5·4	4·5	4·3	2·8	2·4	2·0	2·7	3·0	2·3	1·5	1·4	6·7	5·2	2·6	3·2	5·9	*7·3*	6·1	2·9	6·3	4·2	2·9	3·8	95·4
June	1·9	*16·2*	0·7	1·2	1·7	2·2	1·6	0·7	0·3	0·2	0·4	0·2	0·5	1·9	1·5	0·3	0·5	0·8	0·6	7·4	8·3	0·3	0·4	0·5	50·3
July	4·1	3·6	5·0	3·8	2·5	3·6	2·6	2·1	1·1	3·7	2·9	2·1	14·5	*15·7*	11·5	1·5	5·0	2·7	3·7	3·1	5·0	6·2	5·4	7·1	118·5
Aug.	7·6	11·7	7·9	2·3	3·6	5·8	6·3	6·0	3·9	4·2	5·6	7·5	12·1	6·5	6·5	6·4	12·2	8·1	6·0	*28·6*	7·8	6·1	4·3	4·6	181·6
Sept.	4·1	1·6	2·9	0·9	1·8	1·8	1·2	1·4	1·6	1·2	2·6	7·7	*12·3*	3·9	2·6	3·6	3·9	2·9	3·2	1·4	0·9	0·8	1·1	1·0	66·4
Oct.	13·0	14·1	14·2	*15·5*	5·6	4·7	2·6	3·3	1·5	1·7	4·6	8·1	7·3	3·8	2·9	6·4	4·0	2·8	5·3	12·3	11·7	6·4	4·2	7·7	163·7
Nov.	4·3	3·3	4·1	2·8	4·6	4·5	2·5	2·5	3·0	6·7	10·0	6·8	*11·8*	11·0	6·5	5·3	9·7	5·9	7·3	5·7	3·1	2·6	4·4	4·9	133·3
Dec.	2·3	7·7	0·4	0·7	0·3	0·4	0·7	1·6	6·5	3·7	4·5	1·2	2·1	1·9	3·3	5·7	*8·0*	5·4	5·1	5·7	5·4	6·6	4·8	1·9	85·9
Annual	61·7	82·7	54·5	44·6	34·1	36·0	31·4	*31·2*	34·7	35·3	43·0	50·4	*87·9*	68·2	50·4	39·8	61·4	54·7	50·7	85·1	59·3	46·1	40·1	47·0	1230·3

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

90 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	4·4	3·4	3·0	2·9	3·8	4·0	2·4	2·2	2·3	0·8	2·4	2·0	3·5	*4·6*	1·6	0·7	2·1	2·7	2·8	3·0	2·7	2·8	3·9	2·9	66·9
Feb.	7·9	7·3	6·9	5·7	6·6	6·4	6·6	9·3	*9·4*	7·4	6·2	5·3	4·9	5·1	5·3	4·2	4·5	5·6	5·4	4·0	4·2	4·7	4·5	8·1	145·5
Mar.	5·3	4·9	4·3	4·2	3·7	2·5	5·2	4·2	5·9	4·8	3·8	5·5	5·0	3·5	1·8	3·2	3·2	4·2	3·2	2·7	3·2	3·6	4·4	*6·1*	98·4
Apr.	*5·0*	4·7	4·5	2·0	2·9	3·3	2·5	2·3	3·9	2·2	2·7	2·1	4·2	2·9	1·9	1·9	2·8	2·2	2·0	3·9	3·6	3·4	2·8	4·1	73·8
May	3·1	2·7	2·8	2·3	1·4	1·9	2·5	2·5	3·1	2·5	2·0	2·4	3·5	4·6	3·2	2·6	4·0	3·2	*5·6*	3·7	3·8	3·6	2·8	3·0	72·8
June	*2·9*	1·9	2·0	2·0	2·7	2·0	2·3	1·7	1·6	0·5	1·1	0·6	1·0	2·1	2·2	1·0	1·5	1·8	1·7	2·3	1·9	1·7	1·0	2·3	41·8
July	5·3	4·0	4·4	4·1	3·3	3·9	3·3	3·0	2·8	1·8	1·5	1·8	1·7	3·2	4·9	1·5	3·0	3·3	3·9	4·0	4·5	*5·5*	3·4	5·3	83·4
Aug.	5·0	4·2	4·8	3·9	2·5	6·0	*6·3*	5·5	4·1	5·0	4·8	6·0	4·6	4·6	3·1	4·3	4·2	3·4	5·1	4·4	3·2	3·4	3·8	4·0	106·2
Sept.	*4·3*	2·5	3·0	2·7	2·4	3·9	2·5	2·5	1·9	2·0	3·1	3·2	3·7	2·5	2·3	2·9	3·4	3·9	1·9	2·0	2·3	2·0	1·9	1·8	64·6
Oct.	5·5	*8·5*	6·2	5·7	4·2	3·5	4·1	4·0	3·1	2·3	2·4	3·4	4·8	4·7	3·7	4·2	4·8	4·3	5·3	7·3	6·1	3·6	3·9	4·9	110·5
Nov.	6·1	4·5	3·5	2·6	3·9	5·2	4·5	4·1	5·2	6·5	6·6	5·9	6·8	*6·9*	5·7	5·5	6·0	6·0	5·3	4·8	3·6	4·3	6·5	7·6	127·6
Dec.	2·7	2·5	0·5	0·3	0·4	1·1	2·0	1·9	3·5	2·6	3·0	1·9	2·1	3·5	3·3	2·2	3·8	3·9	4·4	*5·9*	4·7	5·7	2·4	1·9	66·2
Annual	*57·5*	51·1	45·9	38·4	37·8	43·7	44·2	43·2	46·8	38·4	39·6	40·1	45·8	48·2	39·0	*34·2*	43·3	44·5	46·6	48·0	43·8	44·3	41·3	52·0	1057·7

NOTES ON RAINFALL

91 ESKDALEMUIR 1941

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": No occasions
"Partial drought": No occasions
"Dry spell": April 22–May 13; May 30–June 13 and September 3–24.

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell": No occasions
"Wet spell": No occasions

Rainfall Duration

There were 148 days on which no duration of rainfall was registered. The days with the greatest duration were February 19 and April 17 (each with 24 hours), the respective amounts being 5·0 and 32·1 mm.

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	49	21	86	44	17

Notable Falls of the Year

The greatest amount in a 60 min. period was 15·8 mm. which was recorded between 1h. and 2h. on June 23, of which 15 mm. fell in approximately 5 min., attaining a rate of fall of 181 mm./hr.

Details of greatest continuous falls were as follows

	April 16–18	May 22–23	July 6–7	August 27	October 9–10	October 15–16
Amount (mm.)	34·9	39·6	29·4	36·4	31·5	32·9
Duration of rainfall (hr.)	28·0	26·2	24·0	10·4	13·6	10·1

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 181 mm./hr. at 1h.45m. on June 23. The maximum rate exceeded 50 mm./hr. on April 21, June 21 and 23, July 18, 25 and 29, August 17, 19 and 25, and October 8, 10, 16, 17 and 19.

92 ESKDALEMUIR: h_s(height of recorder above ground) = 1·5 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	0·1	1	4·4	51	0·9	8	···	···	12·4	82	12·3	73	6·9	40	9·4	59	···	···	···	···	4·1	44	1·1	15
2	2·3	32	1·5	17	···	···	···	···	10·3	67	2·8	16	1·7	10	3·8	24	7·1	52	1·5	13	5·0	54	0·8	11
3	4·2	59	5·7	65	0·5	5	···	···	12·4	81	1·4	8	7·2	42	4·4	28	4·0	29	0·1	1	3·9	43	0·2	3
4	5·5	76	7·1	81	0·3	3	···	···	6·6	43	9·4	55	5·4	31	0·8	5	5·3	39	4·9	43	0·1	1	3·5	48
5	2·8	39	···	···	···	···	3·1	23	6·5	42	12·9	75	1·1	6	4·2	27	*10·7*	*79*	···	···	0·1	1	0·5	7
6	···	···	4·6	51	0·3	3	2·0	15	3·0	19	9·4	55	···	···	6·8	44	5·1	38	···	···	0·1	1	0·4	6
7	1·7	23	···	···	4·7	42	···	···	0·2	1	0·4	2	···	···	*10·4*	67	2·8	21	0·1	1	*7·7*	87	5·1	70
8	0·7	10	···	···	···	···	···	···	···	···	5·9	34	10·9	64	2·6	17	···	···	0·3	3	7·5	86	0·5	7
9	6·1	83	0·4	4	0·1	1	1·0	7	3·0	19	0·9	5	13·7	80	0·4	3	4·6	35	···	···	···	···	···	···
10	2·5	34	3·7	40	···	···	2·5	18	4·2	27	5·4	31	*14·1*	*83*	0·7	5	···	···	4·3	40	···	···	···	···
11	1·4	19	···	···	···	···	···	···	3·7	23	3·3	19	8·8	52	4·7	31	1·6	12	7·5	69	3·8	44	···	···
12	···	···	···	···	6·3	55	···	···	0·4	3	11·6	67	3·8	22	7·7	51	4·2	32	7·3	68	3·1	36	0·1	1
13	1·5	20	···	···	9·6	83	0·5	4	3·0	19	10·9	63	···	···	1·8	12	1·8	14	···	···	···	···	···	···
14	···	···	···	···	7·6	65	3·3	24	0·6	4	···	···	2·0	12	10·3	*68*	2·4	19	3·1	29	0·2	2	···	···
15	2·2	29	0·8	8	6·7	57	5·9	42	8·5	53	3·0	17	0·1	1	1·5	10	0·1	1	0·7	7	2·2	26	0·7	10
16	5·1	66	0·5	5	9·7	82	1·2	8	4·5	28	3·2	18	5·7	34	1·3	9	···	···	6·2	60	0·8	10	1·4	20
17	*6·4*	*83*	···	···	*10·0*	*84*	···	···	0·3	2	···	···	5·5	33	1·4	9	5·7	45	0·5	5	···	···	*5·2*	*74*
18	···	···	···	···	···	···	0·5	4	3·1	19	7·4	43	2·3	14	1·4	9	0·3	2	5·5	54	2·6	32	···	···
19	0·3	4	···	···	4·4	37	0·6	4	11·9	73	13·9	80	5·7	34	3·3	22	1·2	10	···	···	7·1	*88*	1·3	19
20	0·4	5	···	···	2·8	23	7·5	52	5·4	33	13·4	77	2·0	12	3·5	24	···	···	6·2	61	···	···	···	···
21	···	···	1·7	17	0·9	7	4·0	28	1·4	9	8·4	48	2·3	14	2·2	15	6·0	49	*7·8*	*78*	···	···	···	···
22	···	···	0·3	3	···	···	···	···	0·4	2	6·3	36	7·0	42	8·8	61	0·9	7	7·0	70	···	···	0·1	1
23	0·4	5	5·2	51	7·6	62	5·4	37	···	···	4·9	28	10·4	63	1·3	9	8·2	68	6·0	61	0·2	3	···	···
24	···	···	2·1	20	···	···	11·8	80	1·4	8	*14·4*	*83*	7·7	47	6·8	47	5·4	45	2·0	20	···	···	···	···
25	···	···	*9·1*	*88*	···	···	*12·4*	*84*	3·9	24	0·5	3	3·0	18	···	···	···	···	2·7	28	5·3	68	4·6	66
26	···	···	6·6	63	0·3	2	4·6	31	···	···	3·1	18	5·1	31	5·5	39	···	···	4·5	47	···	···	···	···
27	···	···	···	···	0·9	7	9·7	65	1·4	8	0·3	2	11·5	71	···	···	3·2	27	0·7	7	···	···	3·3	47
28	···	···	0·4	4	0·7	6	4·8	32	6·6	39	6·5	38	···	···	2·0	14	···	···	5·6	59	2·2	29	3·6	51
29	0·8	10			4·5	35	2·5	17	0·4	2	2·4	14	1·8	11	4·2	30	1·9	16	6·7	63	···	···	3·3	47
30	···	···			2·4	19	0·2	1	7·2	43	2·4	14	3·2	20	8·6	62	1·7	15	···	···	···	···	0·3	4
31	···	···			0·3	2			*14·2*	*84*			4·2	26	8·7	63			4·3	46			···	···
Mean	1·43	–	1·93	–	2·64	–	2·78	–	4·42	–	5·89	–	4·94	–	4·15	–	2·81	–	3·08	–	1·87	–	1·16	–
											Annual mean		3·10	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

93 ESKADLEMUIR: h_s = 1·5 m. 1941

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	1·1	5·1	5·9	7·5	*9·2*	7·6	7·2	0·8	···	–	–	–	–	44·4	19
Feb.	–	–	–	···	0·6	5·1	6·4	5·9	6·4	7·6	8·4	*8·7*	4·5	0·5	···	–	–	–	54·1	20
Mar.	–	–	···	0·5	3·9	9·1	7·1	9·1	9·3	8·2	9·6	*9·9*	9·3	5·2	0·3	···	–	–	81·5	22
Apr.	–	···	1·1	4·3	6·3	6·1	7·7	7·7	6·1	7·5	*9·1*	7·6	6·8	6·6	4·6	2·0	···	–	83·5	20
May	···	0·3	2·2	6·6	10·9	11·5	9·6	11·1	*14·4*	12·0	13·7	11·0	9·5	9·7	8·5	5·8	0·1	···	136·9	27
June	···	1·8	8·7	10·9	11·6	10·9	10·7	10·8	11·5	13·1	14·8	*16·1*	13·0	11·8	14·0	12·6	4·4	···	176·7	34
July	···	0·3	7·6	9·2	10·8	11·1	10·5	11·2	13·3	*13·4*	12·5	11·2	13·2	11·0	9·3	7·2	1·3	···	153·1	30
Aug.	–	···	2·8	5·8	6·8	10·7	12·2	*12·9*	10·6	*12·9*	12·5	12·0	10·5	11·3	5·7	1·8	···	–	128·5	28
Sept.	–	–	···	0·7	2·4	4·9	10·4	*11·7*	10·8	6·7	8·2	8·2	9·6	7·4	3·0	0·2	–	–	84·2	22
Oct.	–	–	–	···	0·9	8·8	11·4	*14·5*	14·4	13·5	12·7	11·0	7·1	1·2	···	–	–	–	95·5	29
Nov.	–	–	–	–	···	4·0	5·5	6·5	8·9	8·3	8·7	*10·5*	3·6	···	–	–	–	–	56·0	22
Dec.	–	–	–	–	–	0·2	4·1	6·7	6·1	*8·2*	7·2	3·5	···	–	–	–	–	–	36·0	16
Annual	···	2·4	22·4	38·0	54·2	83·5	100·7	114·0	119·3	120·6	*125·0*	116·9	87·9	64·7	45·4	29·6	5·8	···	1130·4	25

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.L by the pressure-tube anemograph

94 ESKDALEMUIR: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 235 m. + 15 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	5·8	14	5·3	19	9·1	23	8·6	19	*8·1*	21	4·0	11	2·1	9	5·0	15	5·0	14	4·9	12	2·3	11	1·0	5
2	2·9	11	5·8	17	3·0	13	7·8	22	7·3	18	6·0	13	4·4	14	1·9	11	3·6	14	5·2	18	3·9	13	3·2	11
3	0·8	4	4·7	15	3·1	13	6·4	14	2·3	8	6·2	15	5·3	15	2·5	15	2·8	9	*0·6*	4	5·6	17	4·1	14
4	*0·2*	2	1·5	10	*1·1*	5	5·4	17	2·6	11	4·5	12	4·8	18	4·8	14	2·3	6	2·5	11	1·2	5	0·7	17
5	1·1	7	6·8	17	1·8	10	6·6	17	3·1	11	4·9	12	5·7	18	7·3	22	2·4	7	3·4	9	3·3	17	4·6	14
6	0·9	4	4·1	14	2·2	10	5·9	17	4·5	13	4·7	13	*9·1*	19	5·4	16	2·7	11	2·0	10	10·0	26	10·7	26
7	3·0	12	10·3	27	6·3	17	3·1	12	3·5	11	2·1	7	6·3	15	3·2	13	1·2	8	1·2	5	6·9	19	7·8	19
8	5·5	16	6·4	15	9·6	21	*1·8*	6	*1·1*	8	3·1	12	3·9	11	2·1	10	0·9	7	3·5	11	1·3	9	4·1	12
9	2·0	7	6·9	18	*10·0*	22	2·0	9	1·8	10	4·6	10	2·6	10	2·4	11	3·6	14	4·4	14	7·0	23	6·5	17
10	5·6	17	8·2	23	8·6	*24*	2·9	12	1·5	9	5·7	16	2·7	12	4·8	14	5·2	18	4·7	18	12·1	26	8·5	19
11	7·6	22	2·0	12	3·7	12	4·5	14	2·7	10	1·3	8	2·8	13	5·6	14	4·4	15	5·0	18	5·4	22	8·7	21
12	2·7	13	3·9	14	4·5	15	5·1	17	5·8	22	3·8	15	3·9	12	5·0	20	2·9	11	1·8	11	1·3	9	10·1	24
13	3·5	16	2·8	13	5·9	15	*9·4*	*24*	6·0	18	4·3	14	5·7	17	*10·0*	*28*	4·0	17	3·9	15	2·2	9	10·1	24
14	5·7	14	3·8	11	2·6	7	7·7	21	3·7	13	*7·8*	21	2·7	10	5·0	18	*5·9*	*22*	5·6	20	0·7	7	6·0	21
15	4·2	13	2·9	11	1·5	7	4·0	13	4·3	17	7·4	*25*	2·7	9	1·9	15	1·4	6	5·4	21	3·7	13	8·8	22
16	3·1	12	7·1	23	1·4	5	8·0	18	4·8	16	5·5	15	4·8	20	6·2	17	1·4	8	9·3	26	4·2	14	5·2	19
17	4·1	14	10·4	26	3·5	11	7·0	18	4·9	14	5·7	12	5·4	16	5·0	13	0·6	5	7·4	21	2·4	11	2·5	19
18	4·3	23	6·5	16	1·4	6	5·1	17	2·8	11	2·7	10	5·2	16	4·2	15	1·3	7	8·5	28	4·2	15	0·3	7
19	8·5	21	7·5	13	1·3	5	4·3	14	5·3	15	2·2	10	4·8	15	5·5	15	2·3	9	6·8	25	*0·5*	4	1·6	9
20	8·5	19	6·8	12	4·0	15	3·9	13	4·7	13	1·8	7	5·0	14	3·5	13	*0·6*	5	8·0	23	2·2	13	3·8	17
21	*9·4*	*26*	4·5	11	5·5	21	2·4	13	4·7	16	3·9	14	6·8	*21*	2·2	10	1·9	11	4·8	18	5·6	17	6·7	17
22	5·2	21	*0·3*	3	1·4	8	2·8	12	6·4	18	2·6	11	2·9	10	4·2	14	1·8	7	4·1	15	5·4	17	4·6	24
23	1·7	7	0·7	6	3·4	12	6·4	18	6·6	*24*	5·0	15	2·7	11	*1·3*	10	1·3	6	3·7	12	2·4	13	5·4	23
24	3·9	12	3·8	12	1·3	6	4·9	14	6·5	24	4·6	14	2·8	12	2·2	11	2·4	8	2·3	9	11·4	28	*10·7*	*27*
25	6·5	16	1·0	9	2·8	12	6·8	17	4·5	14	6·3	17	1·6	13	3·3	12	4·8	12	2·8	16	7·0	*31*	4·3	20
26	5·4	14	3·3	15	2·5	9	6·5	18	6·4	16	4·2	12	2·2	9	7·2	20	5·2	15	3·9	17	*13·5*	28	2·9	19
27	5·3	16	9·3	23	4·2	11	4·8	16	5·1	13	4·8	14	*1·4*	7	9·5	23	3·8	13	8·2	*29*	10·9	27	1·4	12
28	4·3	13	*13·3*	*29*	7·8	21	2·8	9	7·0	18	3·6	13	2·3	10	8·2	18	2·2	8	9·0	23	1·2	8	0·3	3
29	3·1	11			5·8	21	3·6	12	7·3	18	*1·0*	5	3·1	13	6·3	19	4·4	13	9·7	24	4·5	13	0·7	10
30	3·5	13			1·4	9	6·0	16	6·0	17	2·3	12	3·2	13	3·8	13	3·6	13	3·7	14	2·8	10	*0·0*	2
31	2·9	11			5·5	14			4·1	11			4·6	17	1·7	9			2·6	11			0·6	5

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

95 ESKDALEMUIR: h_a = 235 m. + 15 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	3·8	3·8	3·9	3·8	3·9	*3·8*	3·9	4·1	4·0	4·3	4·6	4·7	4·9	*5·1*	4·8	4·4	4·4	4·1	4·3	4·2	4·4	4·2	4·3	4·0	4·2
Feb.	5·2	5·0	*4·6*	4·8	4·9	4·9	5·3	5·4	5·0	4·8	5·1	5·5	6·0	6·3	*6·4*	6·3	5·9	5·3	5·2	4·8	5·1	5·2	5·4	5·5	5·3
Mar.	3·9	3·7	3·7	3·8	3·7	3·8	3·8	3·4	3·7	4·0	4·5	4·6	4·4	4·9	*5·0*	4·8	4·8	4·2	4·0	3·8	3·8	*3·4*	3·6	4·0	4·1
Apr.	4·6	4·4	4·4	4·3	*4·2*	4·3	4·7	5·4	5·8	6·2	6·3	6·2	*6·5*	6·5	6·4	6·4	6·0	5·9	5·3	4·3	4·3	4·3	4·3	4·5	5·2
May	3·6	3·6	3·5	3·5	*3·4*	3·6	4·1	4·8	5·1	5·4	5·6	6·0	6·3	*6·3*	6·2	5·6	5·9	5·5	4·7	4·3	4·1	4·1	3·8	3·7	4·7
June	3·0	3·0	2·9	2·9	3·1	3·2	3·7	4·4	4·6	4·9	5·3	5·4	5·5	5·6	*5·7*	5·5	5·6	5·4	4·9	4·0	3·5	3·2	3·1	*2·8*	4·2
July	*2·5*	2·5	2·8	2·5	2·7	2·8	3·1	3·7	4·1	4·4	4·7	5·2	5·5	*5·8*	5·7	5·7	5·7	5·5	4·8	3·9	3·2	2·9	3·1	2·9	4·0
Aug.	3·8	3·7	3·2	3·1	*3·1*	3·2	3·4	3·9	4·8	5·4	5·6	5·9	6·0	6·1	*6·1*	5·8	5·7	5·6	4·9	4·0	3·6	3·6	3·8	3·6	4·5
Sept.	2·0	2·1	*1·7*	1·9	1·8	2·0	2·5	3·0	3·5	3·5	4·0	4·1	*4·1*	4·1	4·1	3·7	3·3	2·9	2·8	2·6	2·5	2·3	2·1	2·0	2·9
Oct.	4·0	3·7	3·5	3·6	*3·3*	3·4	3·8	3·8	4·5	5·4	6·2	6·5	6·9	*7·2*	6·7	6·2	5·8	5·3	5·1	4·7	4·3	3·8	3·7	3·8	4·8
Nov.	4·5	4·4	*4·3*	4·3	4·6	4·3	4·7	4·7	5·0	5·2	5·5	*5·8*	5·7	5·7	5·3	5·1	4·9	4·9	4·8	4·8	4·3	4·3	4·7	4·5	4·8
Dec.	4·5	4·5	4·5	4·5	4·3	4·4	4·6	4·4	4·7	4·5	4·7	5·2	*5·4*	5·2	5·4	4·6	4·8	4·8	4·6	4·7	5·1	4·8	4·5	*4·2*	4·7
Annual	3·8	3·7	3·6	3·6	*3·6*	3·6	4·0	4·3	4·6	4·8	5·2	5·4	5·6	5·7	5·6	5·3	5·2	5·0	4·6	4·2	4·0	3·8	3·8	3·8	4·5

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

96 ESKDALEMUIR: h_a = 235 m. + 15 m. 1941

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.	5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record		Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	4	18	238	323	165	0	60	14	21 14	26	21 13 40
Feb.	28	6	7	53	269	214	130	0	210	19	28 7	29	28 6 55
Mar.	–	0	7	28	197	316	203	0	230	13	1 9	24	10 3 50
Apr.	–	0	5	22	322	291	85	0	270	15	13 22	24	13 20 55
May	–	0	6	21	279	325	119	0	310	14	23 24	24	23 22 50
June	–	0	2	6	236	352	126	0	280	13	15 2	25	15 1 5
July	–	0	3	12	207	367	158	0	220	12	6 14	21	21 17 25
Aug.	–	0	4	24	259	305	156	0	270	15	13 14	28	13 21 50
Sept.	–	0	1	2	110	365	243	0	310	13	14 8	22	14 7 40
Oct.	–	0	9	52	235	295	162	0	290	17	27 20	29	27 17 30
Nov.	26, 27	5	8	79	175	259	202	0	190	18	25 1	31	25 0 5
Dec.	–	0	11	54	256	204	230	0	220	16	6 11	27	24 9 0
Year	3	11	67	371	2783	3616	1979	0	210	19	Feb. 28 7	31	Nov. 25 0 5

97 ESKDALEMUIR 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	77·1	79·4	75·1	78·0	75·2	77·4	76·0	77·7	79·0	78·6	83·5	80·3	87·1	82·8	87·0	84·2	86·2	84·3	85·4	84·7	80·4	83·1	79·3	81·2
2	76·9	79·4	75·0	78·0	75·3	77·2	76·0	77·7	79·3	78·9	83·8	80·3	87·1	82·8	87·5	84·5	86·4	84·3	85·3	84·7	80·2	83·0	79·3	81·2
3	76·7	79·3	75·0	78·0	75·4	77·3	76·0	77·6	80·0	78·9	83·2	80·3	87·0	82·9	87·8	84·2	86·4	84·4	85·2	84·9	80·0	82·9	79·3	81·1
4	76·3	79·3	75·0	78·0	75·5	77·3	76·6	77·7	80·3	79·0	82·9	80·4	86·6	82·8	87·5	84·3	86·3	84·4	85·6	84·9	80·1	82·8	79·5	81·1
5	76·0	79·3	75·0	78·0	75·6	77·3	76·7	77·7	80·3	79·0	83·1	80·7	86·2	82·9	87·0	84·4	86·8	84·5	85·3	84·8	80·1	82·8	79·2	81·1
6	76·0	79·1	75·0	78·0	75·4	77·3	76·8	77·7	80·1	79·0	83·6	80·7	86·0	83·1	86·7	84·4	87·0	84·7	85·4	84·6	80·3	82·6	79·2	81·2
7	75·8	79·1	75·0	78·0	75·4	77·3	76·8	77·7	80·0	79·0	83·6	81·0	86·0	83·1	86·1	84·4	87·0	84·7	85·5	84·6	80·3	82·7	79·2	81·1
8	75·8	79·1	75·1	77·8	75·2	77·3	76·8	77·7	79·8	79·1	83·7	80·9	86·0	83·1	86·2	84·5	87·0	84·8	85·7	84·6	79·7	82·7	78·6	81·1
9	75·8	79·1	75·1	77·8	75·6	77·3	76·8	77·7	79·6	79·0	84·1	80·9	86·6	83·1	86·1	84·6	86·9	84·9	85·9	84·6	79·0	82·5	78·3	81·1
10	75·8	79·1	75·1	77·8	75·8	77·3	76·8	77·7	79·7	79·0	83·9	81·1	87·0	83·2	86·1	84·6	87·0	84·9	85·8	84·8	78·9	82·3	78·3	81·1
11	75·9	79·1	75·0	77·7	75·9	77·2	77·0	77·6	80·0	79·1	83·5	81·1	87·5	83·3	86·2	84·6	86·7	84·9	85·3	84·8	79·3	82·3	79·3	81·1
12	75·7	79·0	75·0	77·7	76·0	77·3	77·4	77·5	80·0	79·1	83·3	81·1	87·8	83·3	86·3	84·6	86·3	84·8	84·4	84·7	79·8	82·2	79·9	80·9
13	75·7	78·9	75·4	77·7	76·0	77·3	78·0	77·6	80·2	79·1	83·3	81·2	87·9	83·3	86·2	84·5	86·2	84·9	83·9	84·7	80·0	82·2	79·5	80·9
14	75·7	78·9	75·3	77·5	76·1	77·3	78·4	77·8	80·1	79·1	83·6	81·2	87·4	83·4	86·0	84·5	86·3	84·9	83·7	84·6	79·9	82·1	79·7	80·7
15	75·6	78·9	75·8	77·5	76·2	77·3	78·6	77·9	80·0	79·2	83·6	81·2	87·1	83·5	86·0	84·3	86·0	84·8	83·5	84·6	79·9	82·1	79·4	80·7
16	75·6	78·9	75·9	77·5	76·6	77·2	78·7	77·9	80·1	79·3	83·7	81·3	87·0	83·6	86·0	84·4	86·0	84·8	83·9	84·5	79·2	82·0	79·1	80·8
17	75·5	78·9	75·9	77·6	77·0	77·3	78·9	77·9	81·0	79·3	84·0	81·3	86·7	83·6	85·7	84·5	86·0	84·8	83·6	84·3	79·1	81·9	79·0	80·8
18	75·2	78·7	75·8	77·6	76·9	77·2	79·0	78·1	80·7	79·4	84·1	81·4	86·4	83·8	85·5	84·3	86·0	84·8	83·5	84·3	79·4	81·7	78·2	80·8
19	75·3	78·6	75·8	77·6	76·8	77·3	79·0	78·1	81·1	79·4	84·5	81·3	86·2	83·8	85·6	84·3	86·2	84·9	83·0	84·1	79·2	81·7	78·0	80·7
20	75·0	78·4	75·7	77·6	76·9	77·4	79·0	78·1	81·5	79·4	85·0	81·5	86·0	83·9	85·8	84·4	86·1	84·9	83·1	84·1	78·8	81·9	77·8	80·7
21	75·0	78·4	75·7	77·7	77·0	77·6	79·2	78·2	81·8	79·5	85·7	81·5	86·0	83·9	85·8	84·4	86·0	84·7	82·7	84·1	79·0	81·9	78·0	80·7
22	75·0	78·3	75·6	77·6	77·1	77·6	79·6	78·2	81·7	79·6	86·4	81·6	86·0	84·0	85·9	84·4	85·9	84·6	82·1	84·0	79·2	81·8	78·5	80·7
23	75·0	78·2	75·4	77·7	77·2	77·7	79·7	78·3	81·7	79·6	86·9	81·8	86·0	84·0	86·6	84·2	85·6	84·8	81·8	84·0	79·0	81·7	78·5	80·6
24	75·0	78·2	75·3	77·7	77·1	77·7	79·2	78·4	81·7	79·7	86·6	82·1	86·2	84·0	85·9	84·3	85·7	84·7	81·7	83·9	79·9	81·5	78·9	80·5
25	75·0	78·2	75·2	77·7	77·0	77·7	79·2	78·5	81·7	79·8	86·3	82·1	86·8	84·1	86·0	84·3	85·9	84·6	81·6	83·8	80·3	81·5	79·3	80·5
26	75·0	78·2	75·2	77·7	77·1	77·8	79·3	78·5	81·9	80·1	86·0	82·1	87·0	84·1	86·0	84·3	86·0	84·6	81·5	83·8	80·0	81·5	78·8	80·4
27	75·0	78·2	75·1	77·5	76·9	77·9	79·1	78·5	81·8	80·1	85·7	82·3	87·4	84·1	86·0	84·3	86·2	84·8	81·5	83·7	80·0	81·3	78·2	80·4
28	75·0	78·2	75·2	77·4	77·0	77·7	79·0	78·6	81·7	79·9	85·7	82·4	87·4	84·1	85·9	84·3	86·4	84·8	81·7	83·6	80·1	81·4	77·6	80·3
29	75·0	78·1			76·8	77·7	79·0	78·6	82·0	80·0	86·2	82·5	87·2	84·1	85·9	84·3	86·2	84·8	81·0	83·5	79·9	81·4	77·3	80·4
30	75·0	78·1			76·5	77·8	79·0	78·6	82·1	80·1	86·6	82·6	87·0	84·2	86·0	84·3	85·7	84·8	80·4	83·3	79·5	81·2	77·0	80·1
31	75·1	78·1			76·1	77·8			82·8	80·2			87·0	84·2	86·0	84·5			80·4	83·1			76·8	80·1
Mean	75·6	78·7	75·3	77·7	76·3	77·4	78·1	78·0	80·8	79·4	84·5	81·3	86·8	83·6	86·2	84·4	86·3	84·7	83·5	84·3	79·7	82·1	78·7	80·8
											Year		81·0	81·1										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

98 ESKDALEMUIR 1941

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	67·1	72·2	73·0	71·2	71·0	75·9	78·1	87·4	79·7	76·3	67·1	72·8
2	65·7	67·7	72·8	73·1	73·0	78·2	77·3	79·6	86·5	82·1	71·4	74·7
3	52·3	68·7	71·0	74·1	74·9	75·1	85·9	76·6	72·3	76·9	70·6	78·0
4	54·6	62·0	70·8	75·1	*64·1*	77·1	75·8	84·4	78·0	79·6	76·0	70·0
5	52·0	64·8	64·5	73·2	72·2	77·6	77·7	80·9	83·0	77·0	67·8	68·6
6	*51·7*	73·0	67·2	69·8	68·0	75·8	84·6	74·3	75·4	84·4	79·7	77·4
7	70·6	72·1	69·0	71·9	72·7	74·3	85·7	74·1	81·9	78·9	71·9	71·7
8	72·9	75·6	72·3	72·5	72·8	78·7	85·3	77·0	81·9	82·5	*62·8*	68·5
9	67·8	75·5	74·2	72·1	69·7	80·3	74·8	75·2	84·8	85·2	63·2	75·4
10	68·6	72·6	73·0	*62·9*	70·1	77·8	74·5	82·1	83·5	82·3	74·7	80·9
11	74·9	70·1	74·5	75·1	69·3	71·8	77·1	84·0	81·5	78·2	78·9	79·2
12	73·6	72·4	71·2	79·4	73·6	*71·2*	84·9	77·1	76·8	*64·1*	75·1	78·6
13	71·4	74·1	69·3	79·9	77·8	72·2	86·8	80·0	80·7	68·2	72·0	75·9
14	72·1	72·4	69·7	77·0	74·1	80·9	85·4	79·8	84·3	80·7	74·7	76·5
15	65·8	76·0	68·1	72·2	65·8	82·0	79·1	73·8	*72·0*	73·8	73·0	73·0
16	59·8	68·7	65·3	75·6	72·0	79·5	84·5	81·7	81·1	79·4	68·1	75·6
17	63·7	73·0	69·7	77·9	75·0	83·7	73·8	81·4	77·6	75·0	75·9	72·5
18	56·5	72·2	66·2	75·8	73·2	83·5	83·8	*	78·1	79·3	77·3	64·0
19	68·3	71·2	72·5	75·0	75·6	71·5	78·0	80·5	81·9	75·3	65·7	73·5
20	67·1	70·8	63·6	75·3	73·8	76·2	77·5	78·5	78·9	79·1	67·5	65·8
21	70·9	72·0	77·6	71·1	72·1	82·7	80·9	78·7	80·5	71·8	75·6	79·1
22	73·0	59·5	68·6	69·8	78·5	85·6	81·4	77·0	75·7	70·2	72·3	77·6
23	72·5	62·0	68·1	74·1	81·6	84·4	*72·0*	75·2	74·4	67·6	73·4	72·5
24	73·2	59·4	65·6	67·0	78·2	*	77·0	73·7	76·4	73·0	78·0	80·2
25	73·4	61·7	73·7	71·4	71·6	74·0	77·5	75·6	79·8	65·3	77·8	75·2
26	72·6	*58·3*	†72·8	72·5	77·7	77·8	84·9	82·9	86·9	71·0	69·1	66·8
27	72·0	69·6	75·2	67·6	79·1	74·0	72·7	80·1	85·7	69·4	79·9	69·5
28	71·9	77·8	74·8	65·2	79·1	84·1	75·1	83·9	83·6	74·2	69·9	64·8
29	73·1		70·1	68·6	78·9	83·2	78·2	81·8	79·3	70·8	69·9	*63·1*
30	71·4		*61·1*	74·8	78·1	86·0	80·8	80·0	73·3	72·6	76·1	65·1
31	71·2		72·4		80·5		80·6	*72·3*		74·5		68·5
Mean	67·5	69·5	70·3	72·7	74·0	78·5	79·7	79·0	79·9	75·4	72·5	72·7
						Year	74·3					

* Defective thermometer † Under Snow

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

99 ESKDALEMUIR 1941

	JANUARY, factor 5·18				FEBRUARY, factor 5·17				MARCH, factor 5·18			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	205	Z+	Z-	Z+	285	580	225	275	70	160	95	275
2	270	65	120	260	370	135	220	105	245	Z+	Z-	150
3	90	90	215	285	75	355	500	545	110	235	65	Z+
4	150	325	565	385	335	315	310	560	215	255	185	140
5	265	330	615	Z+	205	Z-	Z-	-160	140	770	Z±	360
6	300	310	130	240	100	150	285	565	200	95	Z-	285
7	60	30	70	130	Z-	-10	120	165	200	215	150	150
8	-45	55	115	195	245	210	-215	205	85	Z-	125	75
9	125	145	145	290	85	225	200	375	30	30	35	130
10	280	140	Z-	300	Z-	110	130	Z-	55	20	55	185
11	90	115	85	-15	140	300	285	345	105	65	175	115
12	140	240	225	630	245	395	165	Z-	185	220	350	375
13	220	360	295	275	Z-	Z-	130	270	250	310	265	420
14	150	310	130	115	355	-85	Z-	90	310	300	385	355
15	325	210	400	360	-15	Z-	315	345	495	405	220	500
16	710	140	395	825	240	275	220	60	190	190	205	305
17	275	345	355	500	55	225	60	75	215	580	415	330
18	235	315	130	420	70	200	315	130	-	-	110	65
19	95	Z-	Z±	-60	180	560	660	645	115	160	195	180
20	-60	5	40	-10	355	500	515	305	140	260	165	125
21	75	100	130	Z-	85	190	200	265	25	180	105	305
22	215	Z-	Z-	460	520	520	475	350	130	215	225	70
23	405	270	665	Z+	395	230	160	430	Z+	185	145	150
24	445	420	60	530	360	515	170	Z+	205	165	55	345
25	-20	95	85	115	390	270	365	650	Z-	-10	140	Z+
26	65	20	170	170	215	235	285	325	-120	Z-	Z-	Z±
27	10	125	415	265	35	140	Z-	5	270	180	Z-	35
28	430	105	190	325	Z-	45	160	155	35	25	65	85
29	310	225	175	340					65	120	140	265
30	220	110	310	385					120	120	180	120
31	125	65	430	620					Z-	Z-	205	Z+
(a)	224	181	247	351	232	290	270	302	162	218	171	218
(b)	193	176	219	318	230	304	281	345	158	200	183	239
Mean	(a) 247		(b) 226		(a) 274		(b) 290		(a) 192		(b) 195	

	APRIL, factor 5·22				MAY, factor 5·21				JUNE, factor 5·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	Z+	300	50	35	130	155	150	170	55	125	190	160
2	-15	20	10	145	135	170	195	140	170	160	-	-
3	160	30	-35	105	70	165	160	235	-	-	105	255
4	30	115	25	-95	380	210	120	20	255	75	150	130
5	60	55	115	160	45	55	115	115	610	150	120	330
6	85	100	150	115	100	80	105	110	-	170	-	-
7	275	155	110	120	75	95	135	105	-	-10	40	155
8	60	65	120	240	75	95	95	70	15	60	125	85
9	75	95	205	200	75	210	150	275	-	180	125	60
10	45	170	210	Z-	205	140	125	220	65	40	125	170
11	300	120	165	180	205	155	140	340	45	50	85	125
12	140	155	150	190	250	170	100	185	265	220	140	195
13	35	75	100	115	185	125	135	170	370	115	150	155
14	85	85	Z±	140	20	95	85	Z±	80	420	115	95
15	30	215	115	155	110	400	105	120	60	85	105	155
16	-90	145	105	Z-	125	90	185	230	70	125	140	345
17	Z-	Z-	Z-	Z-	Z-	115	130	195	355	455	265	230
18	Z-	Z-	100	155	75	100	105	300	275	160	155	250
19	85	50	105	240	90	120	115	65	140	145	-	-
20	295	Z-	150	140	155	115	105	Z-	-	-	190	250
21	85	100	Z-	50	200	180	-55	240	165	610	165	Z-
22	65	145	100	-55	95	140	85	Z-	(25)	240	160	Z-
23	-10	65	75	105	-160	-45	Z±	Z-	Z-	245	150	335
24	50	45	95	135	-10	135	150	250	85	230	145	260
25	55	85	145	200	175	Z-	125	150	160	110	80	205
26	60	90	85	180	45	-135	Z-	210	330	220	155	145
27	90	95	100	160	Z-	85	Z+	210	230	55	115	155
28	170	150	105	100	135	145	145	195	225	160	135	245
29	150	120	115	45	180	-320	95	210	155	175	65	95
30	115	95	75	55	205	190	175	35	80	220	170	270
31					105	115	95	145				
(a)	108	109	111	139	128	143	127	174	179	185	136	194
(b)	94	97	101	127	137	130	123	172	189	163	137	190
Mean	(a) 117		(b) 105		(a) 143		(b) 140		(a) 173		(b) 170	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 5·05				AUGUST, factor 5·03				SEPTEMBER, factor 5·12			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	130	95	-	-	125	155	160	160	20	15	205	330
2	-	-	75	95	220	155	230	150	185	255	195	185
3	(60)	(200)	140	195	120	145	80	150	(65)	(25)	110	(10)
4	(5)	(25)	135	125	40	155	20	135	(5)	(40)	145	50
5	-	150	80	70	-15	0	125	160	(10)	40	165	235
6	240	340	60	-170	225	165	140	375	70	240	(15)	30
7	210	430	170	575	260	140	175	425	30	105	95	-
8	390	370	180	190	(10)	(20)	150	420	-	40	135	190
9	165	170	185	240	(65)	125	145	(10)	115	220	200	170
10	165	190	220	290	(30)	140	105	170	110	(15)	50	225
11	215	95	100	110	(20)	85	125	(-10)	50	(15)	250	30
12	105	430	105	145	(20)	(5)	115	370	(10)	40	165	380
13	475	495	240	305	(-40)	(5)	50	-	60	30	155	55
14	160	175	85	0	-	-	140	295	55	80	55	95
15	190	220	130	150	170	135	(20)	-	30	95	185	260
16	Z-	220	120	215	Z-	Z-	145	310	(20)	(10)	40	25
17	(65)	(20)	(15)	(10)	(0)	(40)	30	(20)	(20)	110	165	185
18	(50)	(40)	125	175	55	210	40	280	50	50	190	80
19	260	165	-20	265	275	145	130	200	-20	40	115	145
20	145	110	150	85	90	105	145	150	90	110	120	245
21	150	140	85	(30)	-	25	-20	85	110	130	145	-
22	(30)	(45)	170	275	185	180	135	(30)	-	90	195	170
23	240	205	165	225	-	(15)	145	-	(20)	(20)	215	(410)
24	110	145	135	170	-	175	110	-	(20)	45	175	(50)
25	125	150	Z-	255	-	215	-	200	-	-	110	195
26	135	175	105	180	-	15	110	75	450	195	170	145
27	130	265	40	45	115	190	-125	Z-	50	210	160	80
28	75	65	35	45	60	85	Z±	Z-	70	15	-	-
29	45	50	-10	50	Z-	170	Z-	Z-	-	-	40	(30)
30	50	55	365	95	100	155	220	415	(10)	(-0)	155	200
31	245	245	145	200	130	430	240	100				
(a)	156	183	132	166	110	124	124	204	61	84	142	156
(b)	158	187	125	154	103	134	132	195	56	83	148	157
Mean	(a) 159		(b) 156		(a) 141		(b) 141		(a) 111		(b) 111	

	OCTOBER, factor 5·12				NOVEMBER, factor 4·93				DECEMBER, factor 4·63			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	155	365	95	275	200	80	125	260	40	235	250	235
2	305	50	120	95	-85	-150	155	190	540	580	(600)	535
3	(25)	115	120	45	100	110	Z-	50	280	250	180	105
4	(0)	(20)	70	-	-45	175	105	35	110	145	325	Z-
5	-	-	130	210	240	680	Z-	Z-	305	290	160	145
6	Z-	340	200	50	40	-35	90	250	130	Z-	Z+	120
7	(55)	30	(30)	(0)	80	140	275	305	80	85	230	180
8	(0)	(0)	255	Z-	240	180	215	305	105	165	40	75
9	130	410	270	-160	15	255	320	365	65	60	180	145
10	Z±	175	80	(10)	190	250	90	275	80	85	110	175
11	(0)	50	90	175	-155	295	365	320	40	110	220	95
12	90	155	205	255	45	120	(240)	435	95	Z-	120	Z±
13	130	130	165	70	200	90	-45	Z-	85	115	85	-95
14	85	95	30	130	80	140	185	345	25	165	Z-	205
15	165	90	255	125	240	120	335	290	95	120	180	65
16	Z-	90	Z-	Z-	145	180	450	-55	115	Z-	215	320
17	185	215	125	-55	Z-	280	220	110	140	250	415	420
18	30	150	(90)	45	-95	100	260	360	285	345	345	Z-
19	-	-	0	60	220	230	125	115	365	245	300	165
20	-25	85	95	190	55	120	40	580	55	355	305	145
21	215	135	205	-	160	-80	Z-	490	85	75	110	195
22	-	145	185	340	335	275	135	-65	110	240	155	170
23	195	60	-	-	Z-	235	120	Z-	175	70	120	140
24	-	-	175	195	-120	130	120	75	80	115	100	190
25	85	155	205	95	40	135	145	470	85	115	140	170
26	115	170	135	375	130	110	-120	65	115	205	-45	Z-
27	225	160	80	110	25	125	120	205	70	135	230	170
28	85	105	145	130	165	285	295	255	190	180	190	385
29	80	65	145	205	255	230	125	160	210	230	440	520
30	145	Z-	-40	95	140	325	195	225	290	705	(665)	Z+
31	-25	175	110	280					650	285	395	535
(a)	115	138	136	148	145	200	194	261	164	213	243	224
(b)	101	146	132	126	89	159	183	240	171	191	223	212
Mean	(a) 134		(b) 126		(a) 200		(b) 168		(a) 211		(b) 199	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	149	172	169	211
(b)	140	164	166	206
	(a) 175		(b) 169	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	−36	−43	−38	−74	*−85*	−70	−74	−68	−49	−42	−26	−3	+33	+25	+32	+29	+44	+63	+110	*+111*	+84	+55	+26	−10	−19	7	248
Feb.	−44	−58	−54	−55	−74	−47	*−85*	−17	+7	+43	+68	+7	+24	+14	+42	+20	+7	−24	+15	+57	*+85*	+59	+38	−20	−18	6	308
Mar.	−22	−16	−31	−40	*−59*	−37	−30	−16	−14	+12	+2	+3	+15	−12	−14	+7	+14	*+56*	+55	+29	+36	+52	+17	−14	−10	9	249
Apr.	+16	−9	−22	−33	−37	−29	−26	*−39*	−21	−11	−3	−17	−24	−18	+8	+8	+21	+20	+37	*+61*	+46	+37	+24	+16	−13	9	123
May	+12	+11	−2	−10	−1	+18	+10	+10	−8	−23	*−29*	−22	−17	−15	−8	−12	−1	−1	+10	+14	+13	+10	*+22*	+14	−24	14	144
June	+39	+31	+27	+11	+4	+10	+25	+11	+5	+22	−6	−35	−46	−51	−45	−50	−53	*−58*	−28	+2	+6	+46	*+84*	+40	+76	8	198
July	+14	−1	−17	−29	−23	+58	*+59*	+14	+23	−4	−21	−22	−20	−16	−23	*−41*	−35	−40	−28	+1	+41	+50	+30	+18	−48	7	169
Aug.	−15	−9	−36	−51	*−87*	−61	−56	−60	−58	−39	−11	−18	+11	−4	+1	+12	+47	+47	+40	+87	*+175*	+81	+18	−18	−93	4	200
Sept.	−37	−50	−52	−54	−57	−74	*−82*	−76	−53	+32	+32	+30	+27	+23	+11	+45	+50	+43	+35	+60	*+64*	+61	+25	−13	+36	6	137
Oct.	+2	+16	−12	−40	−28	−18	*−42*	+29	*+48*	+37	−2	−11	+13	−16	−19	−6	+19	−8	−18	−36	+12	+20	+38	+13	+18	4	164
Nov.	−45	−25	−18	−23	−13	−36	−36	−4	−8	+5	+22	+27	+10	−2	+35	+53	+15	−8	−16	+10	*+57*	+50	+2	*−46*	−51	6	198
Dec.	−9	0	−31	−48	−64	−43	−75	*−81*	−57	−1	−9	−11	+4	−2	+27	+45	+69	+43	+60	*+73*	+60	+65	+8	−20	−9	9	287
Year	−10	−13	−24	−37	*−44*	−27	−34	−25	−15	+3	+1	−6	+3	−6	+4	+9	+16	+11	+23	+39	*+57*	+49	+28	−3	–	–	202
Winter	−33	−31	−35	−50	−59	−49	*−67*	−43	−27	+1	+14	+5	+18	+9	+34	+37	+34	+19	+42	+63	*+71*	+57	+19	−24	–	–	260
Equinox	−10	−15	−29	−42	*−45*	−39	−45	−25	−10	+17	+7	+1	+8	−6	−3	+13	+26	+28	+27	+29	+39	*+43*	+26	+1	–	–	168
Summer	+13	+8	−7	−20	*−27*	+6	+9	−6	−9	−11	−17	−24	−18	−21	−19	−23	−11	−13	−1	+26	*+59*	+47	+39	+13	–	–	178
	1a and 2a days only*																										
Jan.	+9	−28	−51	−51	−55	−53	*−60*	−39	−53	−44	−16	+2	+26	+20	+30	+39	+40	+45	−13	+38	+59	*+75*	+56	+10	+160	7	159
Feb.	−70	−60	−84	−107	*−116*	−57	−28	+34	+32	+2	*+90*	+56	−2	+8	+7	0	+5	+84	+74	+53	+46	+36	+45	−55	−94	4	195
Mar.	+22	+8	0	−4	+7	0	−2	+13	+12	+14	−34	*−46*	−17	*−46*	−22	−15	−12	−15	+13	+35	*+42*	+37	+5	+1	+70	8	124
Apr.	−1	−29	+22	−9	+6	+35	+60	*+77*	−6	*−46*	−43	−38	−23	−13	−14	+2	+22	+7	−12	−6	−4	+9	+23	−9	+20	8	89
May	+28	+33	+27	+24	+25	−10	−34	−104	*−142*	−37	−21	−12	+4	+15	+11	−8	−26	−11	+9	+15	*+64*	+61	+56	+42	−46	3	102
June	+45	+21	+22	+21	+42	+5	−25	−14	−21	−43	−40	*−45*	−36	−10	−14	−23	−6	−21	−11	+14	+21	+25	+43	*+56*	−19	8	141
July	+1	+55	+22	+83	*+140*	+116	+107	+115	+57	+2	−36	−47	−50	−59	−78	−46	*−85*	−43	−30	−41	−61	−66	−22	−37	−14	7	130
Aug.	−29	−45	−45	*−71*	−23	+61	+87	*+102*	+72	−6	−10	−8	−18	−9	−11	−23	−15	−10	+37	−23	−36	+23	+34	−33	+5	3	171
Sept.	−43	*−56*	−53	−30	−24	−23	+23	+13	+11	+35	+5	+21	+19	−5	+10	+18	+37	*+54*	+49	+18	+5	−17	−23	−41	−16	8	126
Oct.	0	−45	−48	−1	+4	−24	−25	+14	*+51*	+38	+30	+7	−6	+16	+28	−41	*−83*	−24	+23	+27	+27	+14	+11	+14	+21	6	125
Nov.	*−67*	−52	−60	−54	−19	−52	−25	+20	+18	−3	+3	+18	+38	+38	+19	+44	+25	+14	+44	*+81*	+47	+16	−30	−57	+56	9	146
Dec.	−16	−26	*−46*	*−46*	−34	−15	−27	−18	+8	0	0	+17	+22	*+48*	+15	+43	+32	+36	+30	+23	−12	−16	−22	−2	−20	9	153
Year	−10	−19	*−25*	−20	−4	−1	+4	+18	+3	−7	−6	−6	−4	−0	−2	−1	−5	+10	+18	*+19*	+17	+16	+15	−9	–	–	138
Winter	−36	−41	−60	*−65*	−56	−44	−35	−1	+1	−11	+19	+23	+21	+29	+18	+31	+25	+45	+34	*+49*	+35	+28	+12	−26	–	–	163
Equinox	−5	*−31*	−20	−11	−2	−3	+14	*+29*	+17	+10	−11	−14	−7	−12	+1	−9	−9	+5	+18	+19	+17	+11	+4	−9	–	–	116
Summer	+11	+16	+7	+14	*+46*	+43	+34	+25	−9	−21	−27	−28	−25	−16	−23	−25	*−33*	−21	+1	−9	−3	+11	+28	+7	–	–	136

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation to 0a, 1a, 2a days see p.90, *Observatories' Year Book, 1938*.

† See p.10, *Observatories' Year Book, 1938*.

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	2c	3·4	1b	2·1	2c	3·1	1b	1·9	0a	···	0a	···
2	1b	0·3	1b	0·1	2c	6·1	2a	4·4	0a	···	0a	···
3	0a	···	0a	···	2b	3·1	2a	3·1	0a	···	0a	···
4	0a	···	0a	···	1a	2·3	2b	3·9	0a	···	1a	0·6
5	0b	···	2c	9·7	1c	2·8	1a	0·4	0a	···	0a	···
6	0a	···	1c	2·1	1b	1·9	0a	···	0a	···	0a	···
7	1a	1·9	2b	5·5	0a	···	0a	···	0a	···	1a	(1·8)
8	2b	3·5	2b	4·5	2b	6·4	0a	···	1a	0·2	1b	0·8
9	0a	···	1a	0·4	1a	0·1	0a	···	1b	0·8	1a	(0·1)
10	1b	1·7	2b	3·6	1a	0·1	2b	4·0	0a	···	1a	0·7
11	1b	2·3	0a	···	0a	···	1a	1·4	0a	···	1a	0·2
12	1a	0·3	2c	7·6	0a	···	0a	···	0a	···	0a	···
13	1b	0·7	2c	11·7	0a	···	1b	0·7	1a	0·8	1a	0·5
14	1b	0·9	2c	9·6	0a	···	2c	3·3	2c	5·9	2b	3·1
15	0a	···	2c	8·0	0a	···	1b	2·4	1b	0·5	1a	0·1
16	0b	···	1a	0·6	0a	···	2c	9·7	2b	3·4	0a	···
17	0b	···	1a	2·3	0a	···	2c	23·6	1b	0·5	0a	···
18	1b	0·5	0a	···	1b	-	2c	9·0	1b	0·7	0a	···
19	2b	12·6	0c	···	0a	···	1b	0·7	0a	···	0a	···
20	2a	12·5	0a	···	0a	···	1b	2·7	2b	3·3	0a	···
21	2b	4·4	1b	0·1	1a	0·2	1c	2·3	2b	3·1	1b	1·9
22	2c	7·5	0b	···	1a	0·2	2a	5·0	2b	5·9	1b	0·9
23	0b	···	0a	···	1b	0·6	1a	2·0	2c	17·6	2b	(3·5)
24	1b	1·7	0b	···	1a	1·0	0a	···	2c	5·9	0a	···
25	2a	3·1	0b	···	2c	8·1	0a	···	1b	0·9	1b	0·5
26	1a	0·4	1a	0·2	2c	13·9	0a	···	2c	9·0	1a	0·1
27	1a	0·2	2c	8·6	2c	7·6	1b	0·2	2c	5·1	0a	···
28	1b	0·7	2b	3·7	1a	0·6	0a	···	0a	···	0a	···
29	0a	···			1a	0·1	1a	1·5	1a	2·7	1a	0·1
30	0a	···			1b	1·6	2a	3·5	0a	···	1a	0·1
31	1a	0·1			2c	5·6			0a	···		
Total	-	58·7	-	80·4	-	65·4	-	85·7	-	66·3	-	15·0
No. of days used	-	31	-	28	-	30	-	30	-	31	-	30
Mean	-	1·9	-	2·9	-	2·2	-	2·9	-	2·1	-	0·5

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0a	···	1a	0·5	0a	···	0a	···	1a	0·9	1b	0·7
2	0a	···	0a	···	1a	0·1	0a	···	2b	3·1	0a	···
3	1b	0·1	1a	0·3	1a	(0·1)	0a	···	2c	10·4	1a	0·3
4	0a	···	1b	(1·9)	1a	(0·1)	0a	···	1a	1·2	2b	3·2
5	1a	0·1	2b	4·7	1a	0·1	1a	0·4	1b	1·8	1b	0·5
6	1a	2·8	0a	···	1a	0·2	1b	2·0	2a	4·6	2c	4·8
7	2b	3·9	0a	···	1a	0·7	0a	···	0a	···	0a	···
8	0b	···	1a	0·8	1a	1·2	1b	(2·8)	0a	···	1a	0·4
9	0a	···	1a	(0·5)	0a	···	2a	6 6	1b	0·6	1a	0·1
10	0a	···	1a	(0·7)	0a	···	1b	4·6	2b	5·7	1b	2·2
11	1a	0·1	2b	(5·9)	0a	···	1a	0·6	1a	1·3	1b	1·7
12	1a	0·1	1a	(0·5)	0a	···	0a	···	1b	2·8	2c	3·5
13	1b	0·3	2b	(-)	0a	···	1a	1·5	2c	11·8	2b	5·6
14	1a	1·3	1b	(-)	1a	0·8	1b	1·0	1a	1·1	2c	6·0
15	2b	3·0	2b	(4·2)	0a	···	1b	1·8	0a	···	1a	0·2
16	2b	3·1	2b	9·1	1a	0·2	2c	6·9	2a	4·8	1b	1·4
17	(0a)	···	2b	(4·8)	1a	0·1	2b	5·9	2b	3·3	0a	···
18	2b	3·5	2b	(3·7)	1a	1·0	2b	4·9	1a	1·3	1b	0·6
19	1a	1·6	2b	3·2	1a	2·1	1b	2·5	0a	···	0a	···
20	1b	2·1	2b	3·6	0a	···	1a	1·2	2b	3·3	1a	0·4
21	1a	(-)	1a	0·8	0a	···	1a	0·4	2b	5·7	1a	0·2
22	0a	···	1a	0·2	0a	···	0a	···	2b	3·9	1a	0·3
23	0a	···	1a	1·0	0a	···	0a	···	2b	6·3	1a	0·1
24	0a	···	0a	···	0a	···	0a	···	2b	4·2	0a	···
25	1b	1·7	1b	(2·9)	1a	2·1	0a	···	1a	(1·9)	0a	···
26	0a	···	1b	(1·7)	1a	0·2	1a	0·2	1a	3·3	2b	5·5
27	0a	···	2b	7·8	1a	0·7	0a	···	2b	3·4	1a	0·1
28	1a	0·2	2c	5·2	2b	(6·3)	1b	0·7	0a	···	0a	···
29	1a	2·6	2c	4·5	1a	(1·2)	1a	0·7	0a	···	0a	···
30	2b	3·0	0a	···	2b	(6·5)	1b	3·7	1a	0·2	0a	···
31	0a	···	1a	0·1			1a	1·7			0a	···
Total	-	29·5	-	68·6	-	23·7	-	50·1	-	86·9	-	37·8
No. of days used	-	30	-	29	-	30	-	31	-	30	-	31
Mean	-	1·0	-	2·4	-	0·8	-	1·6	-	2·9	-	1 2

Annual values: Character 0 1 2
No. of days used 125 152 88

Duration: Total 668·1
No. of days 361
Mean 1·85 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

102 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	508	506	510	514	516	508	516	518	518	513	510	507	510	509	498	472	483	498	510	502	525	487	498	506	506
2	498	498	522	504	511	518	518	518	515	513	508	504	498	494	507	507	510	515	517	518	522	518	517	511	511
3	513	515	516	517	519	521	522	522	522	522	522	514	514	514	518	523	525	526	526	527	536	521	514	512	520
4	514	506	512	510	514	530	533	533	522	507	497	499	502	502	502	503	507	514	521	523	522	522	518	519	514
5 q	519	520	522	522	525	526	530	530	536	533	527	522	516	518	519	514	529	533	542	542	542	541	534	530	*528*
6	522	532	506	498	498	498	495	537	522	515	506	495	496	510	511	515	523	518	519	518	514	514	511	511	512
7	508	506	502	509	515	515	517	521	514	516	517	513	513	517	517	518	482	490	475	486	508	510	509	493	507
8	494	501	500	505	509	510	509	516	505	503	501	501	512	518	517	517	518	517	517	520	521	521	513	505	510
9	502	502	507	509	517	521	533	513	506	509	505	496	494	486	480	501	513	518	510	500	513	508	510	511	507
10	533	509	508	508	510	517	517	517	511	510	503	502	510	502	506	511	513	517	518	509	506	529	510	505	512
11	513	509	506	508	513	517	517	517	517	510	497	496	505	493	503	510	514	521	510	506	505	508	506	501	508
12	509	508	509	510	518	516	517	517	512	509	506	507	506	504	502	517	521	518	520	522	521	521	526	504	513
13	508	514	516	516	515	513	513	514	519	520	513	514	513	516	518	523	524	525	523	520	514	519	509	513	516
14 q	513	515	512	515	519	520	519	516	517	518	513	515	518	523	524	521	521	523	525	520	521	520	506	494	517
15 q	506	513	516	513	517	517	520	528	528	531	525	521	521	523	530	525	521	523	521	524	524	521	523	521	521
16	521	523	523	528	531	532	534	532	536	532	521	505	505	508	509	489	504	516	512	512	516	521	524	522	519
17 d	505	508	499	508	512	524	529	522	509	520	516	513	517	501	492	493	481	496	469	484	468	465	466	492	500
18 d	505	501	491	481	505	516	506	501	507	504	485	501	504	504	508	505	485	477	470	486	489	502	520	551	500
19	513	495	497	496	495	501	520	516	497	496	492	486	500	497	489	497	500	492	501	516	516	524	520	520	503
20	497	502	500	509	512	516	513	508	512	504	509	501	504	509	512	516	517	520	523	527	520	546	520	516	513
21 q	520	521	523	521	527	530	531	529	523	513	509	508	512	516	520	520	520	519	520	520	518	524	520	517	520
22	517	520	520	528	528	528	528	528	527	524	520	516	518	524	530	528	528	527	516	500	504	547	523	514	523
23 d	523	528	513	520	520	523	526	528	512	501	504	496	490	488	507	482	475	485	489	501	500	481	491	505	504
24 d	506	504	508	511	507	495	516	515	511	503	499	481	469	476	499	499	480	483	480	476	503	532	485	491	*497*
25 d	504	500	507	500	508	526	507	505	503	503	468	499	499	490	495	497	500	507	502	514	500	511	508	523	503
26	464	488	496	506	512	517	514	520	517	508	490	492	487	495	507	516	495	515	515	513	498	545	511	511	505
27	514	518	519	516	519	529	530	519	515	511	488	496	502	503	510	507	494	504	496	523	515	507	523	531	512
28	499	503	512	516	522	522	526	526	519	501	501	500	500	500	511	511	515	511	514	539	514	527	510	515	513
29	514	515	513	515	519	519	521	520	510	507	500	496	501	510	511	515	515	511	519	522	520	521	520	528	514
30	520	513	518	514	512	519	524	526	512	510	506	503	499	496	499	496	492	496	506	505	508	511	519	515	509
31 q	516	514	511	515	517	519	523	515	508	511	508	508	511	512	515	512	515	519	520	521	520	520	519	520	515
Mean	510	510	510	511	515	518	520	*520*	515	512	505	*503*	505	505	509	508	507	511	510	513	513	517	512	513	511

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

103 ESKDALEMUIR (D) — 12° + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	51·3	52·1	53·3	53·4	53·0	53·4	53·9	53·2	53·2	53·2	53·8	53·4	54·8	57·2	56·6	52·9	58·9	54·1	52·9	47·6	42·4	46·8	50·3	50·4	52·6
2	49·5	49·6	52·3	52·1	52·2	53·0	52·7	52·5	52·7	53·0	53·6	54·7	55·2	56·8	54·9	53·9	52·2	53·2	53·5	53·5	53·2	52·2	49·6	51·1	52·8
3	51·4	52·3	52·6	53·4	53·2	53·2	53·0	52·9	52·5	52·8	52·4	52·5	54·1	55·8	55·1	54·8	54·9	55·0	54·8	51·9	51·3	51·7	51·6	45·5	52·9
4	43·0	48·3	49·9	51·6	52·4	52·1	52·6	53·2	53·0	53·0	53·2	53·3	55·9	56·6	56·2	55·9	54·9	53·9	53·3	53·2	52·8	52·3	52·2	52·2	52·7
5 q	52·4	52·8	52·9	53·0	53·2	53·2	53·3	53·3	53·8	53·9	53·9	55·1	56·1	56·2	56·5	55·9	55·0	54·8	54·7	54·0	53·9	53·1	52·8	52·1	*54·0*
6	50·4	51·3	48·8	42·2	40·6	44·0	49·3	54·0	55·6	52·7	52·9	54·8	55·1	55·0	54·7	54·4	55·1	55·0	54·8	54·9	53·0	52·4	52·3	52·3	51·9
7	52·2	50·8	50·9	50·2	51·1	51·7	52·2	52·8	53·1	54·3	53·8	54·1	55·8	55·4	54·8	55·8	54·0	51·5	56·6	54·4	52·9	52·3	52·2	50·4	53·1
8	50·5	52·0	51·3	51·1	50·6	51·2	51·4	52·4	53·0	54·0	54·2	55·7	57·1	55·3	54·5	54·8	54·2	54·7	55·2	55·2	53·5	49·1	47·6	49·2	52·8
9	50·2	52·1	49·4	50·2	51·9	52·2	52·6	53·3	54·5	55·3	55·0	57·4	61·0	60·1	62·1	56·6	53·8	53·4	53·4	48·8	51·7	51·7	52·8	53·0	53·9
10	51·2	48·4	50·5	51·8	52·3	52·7	52·1	52·3	52·1	52·6	53·9	56·0	57·1	56·0	56·5	55·0	54·6	52·5	53·4	51·3	51·7	53·2	52·2	49·5	52·9
11	49·5	44·3	47·1	49·9	51·1	51·2	52·1	52·1	51·8	52·2	53·6	55·5	58·5	58·6	56·6	55·4	53·9	54·1	54·9	52·5	54·3	53·3	49·3	51·3	52·6
12	49·8	49·9	49·8	51·4	51·4	51·5	52·3	51·8	51·4	52·1	53·1	54·0	54·9	56·5	55·8	55·9	55·7	53·9	53·9	53·8	52·6	50·4	49·9	48·7	52·5
13	52·9	48·6	50·2	50·7	52·1	52·5	52·1	51·7	51·3	51·4	51·4	54·5	55·6	56·2	55·1	54·0	54·0	54·5	54·5	54·7	53·9	51·0	52·3	51·1	52·8
14 q	51·4	51·9	51·1	52·7	52·2	52·1	51·4	51·4	51·5	52·2	53·0	54·0	55·6	55·6	54·0	53·8	53·4	53·2	53·5	53·4	53·2	52·3	50·2	50·3	52·6
15 q	50·2	49·6	48·6	49·6	50·6	51·3	51·7	52·1	52·2	52·3	53·6	54·7	55·0	55·7	54·8	54·2	54·3	53·9	53·3	52·8	52·6	52·6	52·2	52·2	52·5
16	52·3	51·7	53·2	53·3	53·7	53·4	53·0	53·2	53·8	53·4	53·2	54·0	56·0	58·3	59·2	60·2	56·4	54·6	53·4	52·5	52·1	52·0	51·4	51·4	54·0
17 d	48·6	50·5	38·6	50·5	52·3	53·0	53·1	56·2	58·4	59·8	55·8	56·0	57·7	60·0	56·7	59·4	53·1	40·3	54·4	50·8	47·9	46·8	39·7	52·0	52·1
18 d	55·8	51·8	52·5	57·6	56·1	55·7	56·7	54·3	53·2	54·1	52·3	53·9	54·9	55·3	54·5	54·1	51·6	45·0	46·9	33·2	50·2	50·5	51·4	51·0	52·2
19	52·0	49·8	50·3	50·6	53·7	55·6	54·5	53·4	52·7	53·3	54·1	53·4	54·9	58·3	53·5	55·8	53·4	46·0	53·1	52·8	51·3	44·0	47·2	54·4	52·4
20	48·1	50·3	54·9	54·9	54·1	52·9	52·9	51·6	51·7	53·0	55·0	55·3	55·2	55·7	54·1	53·2	53·0	53·0	52·5	53·1	52·2	46·7	50·3	51·3	52·7
21 q	51·6	52·2	51·4	53·3	51·1	51·1	51·4	51·5	51·7	52·3	53·1	54·2	55·0	54·8	53·9	53·5	53·2	53·3	53·3	53·0	51·7	50·4	51·5	51·9	52·5
22	52·3	52·9	52·3	53·1	52·3	52·0	52·2	52·4	53·5	54·1	55·3	56·0	56·8	56·8	55·2	54·0	54·7	54·9	54·7	48·0	48·0	45·8	49·8	52·3	52·9
23 d	53·6	55·7	51·9	50·9	50·9	51·8	52·3	52·0	52·9	56·0	55·3	56·3	57·7	59·7	57·9	59·2	53·2	50·2	46·2	54·1	51·9	46·0	46·5	48·3	52·9
24 d	50·6	50·2	52·1	52·3	51·5	50·1	54·1	56·3	53·9	54·6	55·3	57·3	59·7	56·6	60·0	56·3	51·2	43·5	52·9	50·2	47·1	47·8	48·1	50·8	52·6
25 d	54·4	57·1	53·3	53·1	60·1	55·0	51·6	53·4	50·4	52·8	53·5	54·6	56·4	56·0	52·6	55·8	49·2	53·7	50·3	46·0	48·6	51·5	49·4	40·9	52·5
26	48·6	44·6	52·1	52·4	52·8	52·6	56·6	53·9	54·6	52·7	53·7	54·1	55·4	57·6	55·2	57·4	56·0	53·7	53·7	52·7	49·7	40·4	48·6	49·5	52·4
27	52·2	53·1	52·6	52·1	50·8	50·7	52·4	53·2	53·0	53·5	53·4	54·6	55·5	57·1	52·5	55·2	51·7	49·8	50·6	44·5	48·3	49·7	47·1	48·3	*51·7*
28	50·0	52·6	54·2	54·4	53·8	53·2	52·7	52·4	52·0	52·4	54·2	55·2	58·2	57·8	57·4	54·5	52·4	53·4	51·3	43·3	47·4	51·9	49·7	51·8	52·8
29	51·9	53·0	53·3	52·7	51·8	52·0	51·5	51·4	50·9	51·3	52·7	54·5	54·7	55·1	54·3	53·2	52·5	52·1	52·6	52·7	52·2	51·6	51·6	48·1	52·4
30	45·7	51·2	51·6	51·7	54·8	50·7	50·9	51·7	51·8	52·2	54·1	56·9	56·9	57·4	57·8	58·0	56·3	53·5	46·8	48·1	52·6	51·6	47·6	51·0	52·5
31 q	52·5	52·2	51·8	52·5	52·7	52·4	51·7	51·3	51·7	52·9	53·7	54·2	54·6	55·0	54·4	52·9	52·9	53·1	53·4	53·1	52·4	51·8	51·5	50·9	52·7
Mean	50·8	51·1	51·1	51·9	52·3	52·2	52·6	52·8	52·8	53·3	53·7	54·9	56·2	*56·7*	55·7	55·3	53·9	52·2	52·9	51·0	51·2	50·1	*50·0*	50·4	52·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

104 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JANUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1040	1040	1038	1034	1035	1036	1035	1036	1035	1035	1036	1034	1027	1036	1052	1071	1080	1076	1061	1060	1053	1048	1043	1041	1045
2	1040	1042	1038	1038	1040	1040	1039	1037	1036	1037	1040	1040	1039	1042	1050	1049	1049	1045	1042	1040	1040	1040	1041	1042	1041
3	1041	1040	1039	1039	1038	1038	1037	1036	1034	1033	1034	1033	1031	1035	1039	1040	1038	1037	1039	1040	1035	1035	1039	1044	1037
4	1045	1039	1037	1036	1036	1034	1034	1034	1035	1039	1040	1038	1033	1034	1039	1041	1043	1043	1042	1040	1040	1040	1039	1038	1038
5 q	1036	1036	1035	1035	1034	1034	1034	1034	1034	1034	1034	1034	1035	1034	1034	1035	1035	1034	1033	1032	1031	1031	1034	1034	1034
6	1036	1023	1006	1001	994	1008	1021	1018	1021	1028	1034	1035	1040	1039	1040	1039	1038	1040	1040	1042	1044	1043	1042	1042	*1030*
7	1042	1042	1042	1041	1038	1037	1036	1035	1035	1035	1038	1040	1039	1040	1040	1043	1058	1086	1091	1082	1066	1055	1051	1053	1049
8	1054	1050	1048	1045	1040	1040	1040	1038	1041	1043	1045	1042	1040	1042	1041	1040	1040	1041	1043	1045	1047	1051	1043	1042	1043
9	1043	1045	1048	1045	1041	1039	1036	1038	1039	1040	1037	1039	1042	1049	1060	1058	1052	1048	1048	1054	1048	1048	1047	1048	1045
10	1045	1040	1036	1038	1039	1038	1038	1038	1040	1041	1041	1040	1038	1042	1043	1042	1042	1042	1041	1045	1046	1042	1039	1046	1041
11	1046	1042	1039	1036	1034	1035	1036	1036	1036	1039	1040	1040	1039	1042	1046	1045	1043	1042	1046	1054	1052	1052	1052	1051	1043
12	1048	1046	1044	1041	1038	1036	1036	1036	1037	1039	1040	1040	1042	1045	1049	1045	1043	1043	1043	1041	1041	1043	1042	1045	1042
13	1042	1039	1038	1036	1035	1034	1034	1034	1034	1033	1032	1030	1028	1033	1036	1039	1037	1035	1038	1039	1044	1049	1045	1043	1037
14 q	1042	1040	1039	1037	1036	1035	1035	1034	1031	1029	1033	1034	1035	1036	1037	1037	1038	1037	1036	1036	1036	1038	1046	1050	1037
15 q	1051	1046	1043	1039	1036	1035	1034	1033	1031	1031	1031	1033	1034	1037	1039	1036	1036	1036	1036	1035	1034	1035	1035	1035	1036
16	1035	1034	1033	1032	1032	1031	1031	1030	1028	1028	1033	1035	1036	1039	1044	1049	1051	1047	1043	1040	1039	1036	1035	1035	1037
17 d	1030	993	997	1013	1021	1024	1028	1027	1024	1019	1022	1024	1025	1033	1040	1055	1114	1142	1090	1082	1087	1051	1048	1018	1042
18 d	1000	1016	1027	1024	1024	1029	1033	1037	1037	1037	1043	1042	1043	1050	1052	1055	1062	1080	1087	1076	1052	1045	1033	1013	1042
19	1003	1020	1030	1034	1035	1034	1035	1037	1042	1047	1045	1046	1044	1046	1058	1059	1067	1071	1057	1048	1045	1045	1035	1015	1042
20	1021	1029	1027	1025	1032	1035	1039	1042	1041	1039	1036	1038	1040	1043	1043	1043	1041	1041	1041	1040	1040	1037	1027	1030	1036
21 q	1034	1036	1035	1033	1032	1033	1033	1033	1034	1039	1039	1038	1036	1038	1038	1036	1036	1036	1038	1040	1040	1040	1038	1036	1036
22	1036	1034	1034	1033	1033	1032	1033	1032	1030	1032	1034	1036	1037	1037	1037	1034	1034	1036	1041	1055	1055	1034	1030	1033	1036
23 d	1030	1017	1024	1028	1030	1030	1030	1031	1034	1037	1039	1042	1045	1051	1065	1084	1118	1120	1093	1060	1053	1060	1052	1028	1050
24 d	1016	1028	1030	1031	1030	1030	1025	1022	1030	1039	1042	1049	1061	1081	1072	1071	1115	1109	1087	1084	1070	1036	1037	1040	*1051*
25 d	1030	1022	1025	1027	1007	1004	1025	1031	1039	1039	1045	1045	1045	1050	1055	1063	1075	1057	1057	1055	1053	1050	1047	1034	1041
26	998	1012	1027	1033	1034	1034	1033	1028	1029	1033	1036	1042	1044	1051	1057	1059	1054	1051	1046	1046	1054	1043	1037	1036	1038
27	1037	1034	1028	1028	1031	1032	1029	1031	1034	1036	1040	1040	1040	1045	1057	1060	1071	1064	1062	1058	1046	1044	1042	1024	1042
28	1031	1032	1029	1032	1033	1035	1035	1034	1035	1039	1039	1039	1041	1048	1049	1048	1051	1048	1046	1043	1038	1032	1034	1034	1039
29	1030	1030	1033	1036	1036	1037	1036	1037	1040	1039	1037	1034	1034	1036	1040	1043	1044	1045	1041	1040	1040	1040	1040	1036	1038
30	1036	1035	1035	1034	1023	1023	1027	1028	1030	1028	1028	1030	1034	1044	1051	1056	1063	1066	1064	1054	1046	1047	1043	1039	1040
31 q	1034	1034	1036	1037	1037	1037	1036	1038	1036	1030	1029	1031	1034	1036	1037	1040	1041	1040	1040	1040	1039	1039	1038	1037	1037
Mean	1034	1033	1033	1033	*1032*	1032	1033	1033	1034	1035	1037	1037	1038	1042	1047	1049	1055	*1056*	1052	1050	1047	1043	1041	1037	1040

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

105 ESKDALEMUIR — JANUARY 1941

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force											
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ					°A.
1	20 23	566	16 12	455	111	16 10	61·7	20 11	33·3	28·4	17 17	1087	12 41	1024	63	1,2,2,1,3,3,4,3	19	1	83·7
2	2 37	550	14 8	487	63	13 28	57·6	22 12	47·9	9·7	16 17	1052	2 48	1030	22	3,2,1,2,2,2,1,2	16	0	83·7
3	20 54	541	14 2	507	34	13 45	56·2	23 50	38·0	18·2	0 11	1042	12 20	1029	13	1,0,1,2,1,1,2,4	12	0	83·7
4	7 42	536	11 0	495	41	12 51	56·8	0 3	38·9	17·9	17 30	1046	12 32	1032	14	3,2,1,1,1,2,1,0	11	0	83·5
5 q	20 7	548	15 43	506	42	14 8	56·7	23 49	51·3	5·4	0 20	1037	21 3	1029	*8*	0,0,0,2,1,2,1,2	8	0	83·5
6	1 13	549	11 42	477	72	8 11	56·8	4 28	37·9	18·9	20 52	1045	4 26	988	57	3,3,4,3,2,2,2,1	20	1	83·5
7	7 21	532	16 45	443	89	18 0	62·3	16 59	39·7	22·6	18 40	1096	9 50	1033	63	1,1,2,2,1,4,3,2	16	1	83·4
8	* *	532	0 51	490	42	12 25	57·8	21 31	45·0	12·8	0 15	1055	7 38	1036	19	2,1,2,2,1,1,2,3	14	0	83·4
9	6 6	539	14 5	467	72	14 33	65·5	19 31	46·9	18·6	4 53	1064	† †	1036	28	2,3,3,2,3,3,3,2	21	1	83·4
10	0 33	560	13 44	494	66	12 48	59·3	1 1	46·8	12·5	0 4	1051	21 59	1033	18	4,2,2,1,2,2,2,3	18	0	83·4
11	18 20	525	18 58	485	40	13 47	60·5	1 28	43·2	17·3	19 18	1058	4 23	1034	24	3,2,1,2,2,2,3,3	18	0	83·4
12	22 27	537	14 4	494	43	13 30	57·4	21 54	47·2	10·2	14 23	1051	6 10	1034	17	1,2,1,1,2,2,2,3	14	0	83·4
13	21 47	547	‡ ‡	496	51	0 25	57·1	1 30	46·9	10·2	21 25	1054	12 55	1027	27	3,1,2,1,1,1,2,3	14	0	83·4
14 q	$ $	528	23 33	486	42	12 57	55·9	22 35	47·8	8·1	23 55	1054	9 12	1025	29	1,1,0,1,1,0,1,3	8	0	83·4
15 q	9 54	534	0 1	498	36	13 4	56·6	1 55	46·8	9·8	0 1	1053	10 29	1029	24	2,1,2,1,1,1,0,0	8	0	83·4
16	8 40	539	15 37	479	60	14 50	61·3	23 38	50·5	10·8	15 55	1052	8 48	1025	27	1,0,1,1,2,3,2,2	12	0	83·4
17 d	1 31	548	18 8	*403*	145	18 2	*66·6*	17 13	30·7	35·9	17 0	*1208*	1 41	*962*	*246*	5,2,3,3,4,5,4,5	31	2	83·4
18 d	23 36	*613*	19 5	425	*188*	3 32	61·2	*21·8*	19 21	*39·4*	18 50	1105	0 28	994	111	3,3,2,3,2,4,5,5	27	1	83·3
19	‖ ‖	551	17 0	454	97	13 55	60·3	39·1	21 23	21·2	17 16	1073	0 3	1000	73	3,3,3,3,3,4,2,4	25	1	83·2
20	21 43	583	11 0	488	95	2 51	56·7	39·7	21 42	17·0	21 20	1046	0 1	1015	31	3,2,2,3,2,1,2,4	19	0	83·2
21 q	4 18	539	11 2	508	31	12 46	55·8	47·6	21 0	8·2	21 10	1042	4 18	1030	12	2,2,1,0,1,1,2,2	11	0	83·2
22	21 16	574	20 22	486	88	13 12	57·7	41·8	21 13	15·9	19 41	1061	21 58	1028	33	1,2,1,1,1,2,3,4	15	0	83·2
23 d	1 17	555	15 57	443	112	15 54	62·8	36·2	18 15	26·6	17 21	1137	24 0	1010	127	3,1,3,3,3,4,4,3	24	1	83·2
24 d	21 12	558	13 22	432	126	12 55	66·1	38·5	17 26	27·6	16 47	1129	0 3	1010	119	2,3,3,3,4,4,4,4	27	1	83·1
25 d	23 39	542	10 33	453	89	4 17	61·2	32·7	23 54	28·5	16 21	1083	4 53	1000	83	3,3,3,3,3,3,3,4	25	1	83·1
26	21 20	569	0 19	417	152	13 30	60·3	34·0	0 1	26·3	15 34	1061	0 33	985	76	4,2,3,3,3,3,3,4	25	1	83·1
27	23 0	569	13 56	465	104	13 36	62·0	40·9	17 0	21·1	16 52	1072	23 21	1022	50	2,2,2,3,4,4,4,4	25	1	83·1
28	19 20	559	12 57	481	78	12 59	61·3	37·9	19 9	23·4	16 28	1053	0 1	1027	26	2,1,1,2,3,2,4,2	17	1	83·1
29	23 30	546	11 43	487	59	13 10	55·9	44·1	23 52	11·8	17 20	1046	1 20	1029	17	2,1,1,2,1,2,1,3	13	0	83·1
30	¶ ¶	530	17 3	483	47	13 10	59·2	40·9	18 52	18·3	18 21	1070	4 54	1018	52	2,2,2,1,2,2,3,3	17	0	83·0
31 q	18 18	527	9 51	504	*23*	13 46	55·7	50·6	23 6	*5·1*	16 40	1042	10 35	1028	14	1,1,2,1,1,1,1,1	9	0	83·1
Mean	- -	549	- -	474	75	- -	59·4	41·4	- -	18·0	- -	1069	- -	1019	49	-	-	0·45	83·3

q denotes an international quiet day and d an international disturbed day.

* * 21h. 1m. and 21h. 53m. † † 6h. 52m. and 10h. 58m. ‡ ‡ 0h. 5m. and 21h. 10m.

$ $ 18h. 24m. and 18h. 28m. ‖ ‖ 22h. 52m. and 23h. 22m. ¶ ¶ 7h. 32m. and 18h. 28m.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

106 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	518	517	520	520	523	522	521	522	519	516	515	511	502	510	519	523	515	507	508	504	507	510	515	515	515
2	513	516	515	515	516	520	519	519	513	504	505	505	506	515	516	516	515	523	527	503	491	492	510	508	512
3	508	511	507	543	524	515	522	512	471	457	478	491	484	484	484	507	507	510	484	465	479	507	516	508	499
4	500	516	499	503	504	507	511	504	510	500	494	496	501	492	500	503	507	504	503	511	513	511	508	508	504
5	511	523	510	510	516	512	515	526	522	510	507	503	504	508	510	507	516	526	506	511	503	502	499	495	511
6	492	507	504	495	502	515	520	509	507	495	467	481	487	495	488	500	494	507	519	507	500	495	501	512	500
7 d	515	501	500	504	508	519	519	524	508	492	484	495	496	492	485	504	512	524	515	504	535	512	511	515	507
8	528	506	507	512	515	517	515	519	506	495	492	480	495	500	506	503	513	514	511	514	523	523	502	512	509
9	510	507	511	500	511	527	512	519	519	515	510	513	515	516	515	506	513	517	519	508	515	493	503	513	512
10	504	513	515	520	519	519	511	516	509	511	516	508	504	510	512	513	510	515	520	512	512	504	505	511	512
11 q	519	515	511	513	515	516	519	511	516	515	512	513	513	508	510	513	521	520	506	515	496	503	503	504	512
12 q	509	513	511	511	515	514	516	519	519	514	515	515	512	514	514	513	520	524	523	522	517	508	506	509	515
13 d	520	519	518	524	527	539	546	542	526	504	503	527	516	485	487	508	496	476	505	511	500	491	507	496	511
14	501	515	523	503	511	511	508	519	511	499	464	499	511	507	507	495	523	523	522	523	519	522	519	535	511
15	519	523	506	499	487	517	526	525	510	495	476	501	499	499	510	506	521	510	514	505	503	514	520	512	508
16	517	516	499	522	519	522	519	517	519	512	503	501	498	506	509	513	515	518	510	514	513	545	542	502	515
17	523	522	515	514	509	518	517	526	520	506	470	482	487	498	499	514	515	521	507	510	533	507	514	523	510
18 q	520	518	513	512	517	524	522	522	521	502	505	494	498	502	506	507	516	518	510	518	517	519	521	524	514
19	522	519	518	519	521	518	518	518	519	518	512	506	510	507	511	514	513	502	506	518	522	524	522	519	*516*
20	521	518	519	520	528	529	523	530	523	522	521	518	507	499	507	510	511	522	525	527	502	487	494	503	515
21 d	518	502	509	514	510	515	515	515	513	510	502	501	508	502	493	495	507	482	495	510	504	463	472	500	502
22 d	500	502	494	470	514	521	518	509	513	487	479	491	490	516	504	518	512	494	502	500	526	519	498	500	503
23 d	491	503	502	506	506	521	507	502	507	507	494	500	503	484	479	511	499	499	479	482	507	498	475	483	*498*
24	509	506	498	494	503	510	506	509	503	494	488	475	483	494	502	514	491	515	526	534	498	515	514	530	505
25	513	523	511	507	505	514	516	506	504	504	494	484	488	489	507	501	516	503	503	508	514	526	538	537	509
26	510	503	502	494	512	511	506	503	506	489	476	487	494	500	502	519	510	510	513	523	522	521	521	520	506
27 q	518	517	514	516	518	518	517	518	512	495	495	500	503	507	514	516	525	510	516	523	525	522	521	519	514
28	525	515	518	518	520	525	523	521	514	499	494	480	500	507	514	517	513	522	519	521	521	526	525	518	515
Mean	513	513	510	510	513	*518*	517	517	512	502	*495*	499	501	502	504	509	512	511	511	511	511	509	510	512	509

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

107 ESKDALEMUIR (D) — 12° + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	51·6	51·7	52·0	51·9	51·9	51·6	51·5	51·5	51·5	52·3	53·2	54·6	56·3	55·6	55·6	56·3	57·1	58·9	57·6	54·5	54·1	51·6	51·4	50·6	*53·5*
2	50·9	51·8	51·7	51·2	51·7	51·8	51·4	50·6	50·2	51·6	54·3	56·4	55·3	55·2	53·8	53·0	53·1	53·2	53·9	54·3	54·0	49·8	49·9	50·9	52·5
3	51·6	51·5	47·7	47·3	39·7	45·2	48·7	50·5	52·1	54·7	53·7	54·2	57·7	60·0	58·5	55·9	53·8	54·6	50·4	50·2	49·7	48·3	48·3	50·1	51·4
4	49·1	46·0	44·0	49·5	50·4	49·7	48·6	50·2	50·1	50·5	52·9	55·9	60·2	59·5	58·9	56·0	57·0	57·1	55·9	53·2	52·1	51·6	51·4	51·2	52·5
5	50·9	51·4	49·0	52·9	50·2	49·4	50·9	49·5	49·7	50·5	52·8	54·9	57·0	57·8	59·9	58·0	56·3	55·3	57·6	56·0	50·4	36·9	42·3	44·0	51·8
6	45·0	49·7	45·1	47·8	48·8	51·3	58·7	53·2	51·4	51·5	53·3	58·3	56·7	58·7	58·3	60·3	60·6	58·7	55·2	49·4	46·0	47·7	45·9	47·1	52·4
7 d	45·2	39·5	46·0	49·4	47·1	51·7	52·9	53·9	56·0	53·1	53·1	53·9	56·7	59·5	57·6	54·3	54·1	43·9	48·6	53·1	46·2	50·1	48·7	43·4	50·7
8	44·7	47·6	47·8	52·1	52·4	50·2	51·2	51·4	51·7	52·9	55·1	54·9	55·6	56·2	55·1	50·5	52·1	54·0	47·6	49·4	51·7	47·8	49·7	48·4	51·3
9	47·7	50·4	52·4	53·4	52·9	51·2	53·9	56·7	53·2	53·1	53·0	53·6	54·2	56·6	56·5	54·8	53·1	53·3	52·4	47·7	39·6	48·3	49·6	51·6	52·1
10	50·5	57·7	52·3	49·2	50·2	52·1	52·5	51·5	52·2	52·6	53·9	55·0	56·0	56·8	55·0	54·8	54·8	53·8	54·7	56·0	54·3	50·4	52·4	50·4	53·3
11 q	49·6	48·8	50·1	51·2	50·5	51·2	52·4	51·4	52·2	53·1	54·4	55·3	55·7	55·1	55·8	54·9	55·7	55·8	54·4	50·4	52·4	51·3	51·4	48·9	52·6
12 q	48·1	47·7	47·9	49·5	49·6	50·4	50·4	51·1	51·4	52·2	54·0	54·0	54·7	54·8	55·2	53·5	52·7	53·0	52·9	51·6	51·5	51·4	49·6	49·7	51·5
13 d	52·5	48·7	50·2	50·1	50·1	51·4	51·5	51·9	52·8	56·2	60·4	58·5	59·7	62·5	58·4	55·9	54·6	49·4	48·6	53·4	47·2	40·7	39·4	46·9	52·1
14	54·9	58·4	47·0	45·8	49·5	50·2	49·9	51·6	53·6	53·3	53·3	53·2	54·1	55·8	54·1	51·3	51·1	52·9	53·0	50·5	51·6	51·2	50·3	49·0	51·9
15	53·1	48·5	43·2	50·7	55·8	54·7	53·9	53·3	53·1	54·8	57·6	56·2	57·5	56·7	57·6	53·2	51·3	48·6	45·8	43·2	48·8	50·6	51·3	49·6	52·0
16	50·5	50·8	52·3	54·9	49·1	51·2	51·3	51·4	51·5	51·4	52·3	53·5	53·9	55·0	55·9	55·1	54·1	53·2	52·4	53·0	51·7	49·8	49·0	48·5	52·2
17	51·1	53·2	50·3	47·5	49·5	51·1	51·4	51·4	53·0	52·7	53·1	54·2	54·9	55·7	55·8	53·9	53·1	52·2	50·5	41·3	45·0	48·5	51·3	50·2	51·3
18 q	49·6	50·4	49·3	49·5	51·2	52·0	52·4	52·3	51·6	52·2	53·2	54·0	54·8	54·9	54·6	53·9	53·2	52·6	52·2	49·6	51·1	51·5	51·2	50·8	52·0
19	50·6	50·9	51·1	51·2	51·3	51·4	51·4	51·3	51·4	51·6	52·7	52·3	52·7	53·6	53·9	53·8	53·9	48·5	53·9	52·9	52·7	52·3	52·0	51·5	52·0
20	50·9	50·9	51·4	51·7	51·5	50·9	50·9	51·9	52·7	54·1	55·7	55·8	55·8	54·8	54·0	55·1	54·3	54·4	53·9	53·9	51·8	43·4	41·5	45·7	52·0
21 d	50·2	48·1	50·6	51·6	49·5	51·3	50·7	50·5	51·4	52·3	53·4	53·9	56·7	60·2	56·8	55·9	50·2	53·0	50·4	50·6	46·8	38·6	46·7	49·3	51·2
22 d	52·6	51·5	49·5	58·6	54·3	49·2	51·7	51·7	51·3	53·0	54·0	56·5	57·4	53·3	58·5	52·9	37·1	48·5	51·9	42·5	44·9	47·1	44·8	42·4	*50·6*
23 d	52·9	52·4	57·1	51·9	51·6	53·1	53·4	54·9	54·8	53·5	53·1	54·9	57·7	57·2	55·6	54·6	50·2	43·3	33·1	47·0	47·8	45·8	42·2	52·5	51·3
24	49·3	50·7	53·1	54·0	53·9	52·2	52·0	52·6	53·2	54·1	54·9	56·0	56·6	57·7	55·8	53·2	41·5	51·2	47·0	43·2	49·7	50·2	50·7	53·1	51·9
25	51·4	53·7	50·2	50·8	50·7	51·0	50·1	49·7	51·3	52·5	53·9	56·1	56·2	56·3	53·4	53·2	53·0	52·2	43·4	49·4	46·6	46·8	51·6	47·9	51·3
26	49·5	50·1	53·8	54·1	51·7	46·9	49·7	49·5	50·7	53·1	52·9	56·7	55·6	57·1	54·3	53·5	53·0	51·4	49·4	49·5	50·6	50·7	50·8	50·8	51·9
27 q	50·4	50·7	51·3	51·4	51·2	51·1	51·2	49·9	49·8	49·6	51·3	53·3	55·0	55·1	53·9	52·4	51·1	47·4	51·1	52·1	52·1	51·4	50·6	50·7	51·4
28	51·3	52·8	49·6	50·5	50·3	49·8	49·8	49·1	49·1	48·6	52·4	54·9	57·6	57·8	57·3	56·6	53·3	52·9	52·7	51·7	50·7	49·7	49·3	49·9	52·0
Mean	50·2	50·6	49·9	51·1	50·6	50·8	51·6	51·6	51·9	52·5	53·9	55·0	56·1	*56·8*	56·1	54·5	52·7	52·3	51·1	50·3	49·7	*48·3*	48·7	49·1	51·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

108 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — FEBRUARY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1037	1038	1038	1037	1036	1036	1036	1036	1034	1034	1033	1034	1036	1037	1036	1039	1043	1044	1047	1054	1054	1053	1049	1046	1040
2	1044	1042	1040	1040	1040	1040	1040	1039	1036	1034	1034	1036	1039	1036	1036	1039	1041	1041	1041	1051	1067	1071	1057	1048	1043
3	1045	1042	1041	1019	1009	1016	1022	1029	1039	1040	1040	1040	1042	1046	1046	1050	1052	1058	1082	1087	1085	1064	1054	1047	1046
4	1047	1039	1033	1031	1035	1040	1041	1043	1045	1045	1040	1038	1037	1045	1052	1058	1060	1064	1064	1060	1056	1052	1052	1051	*1047*
5	1048	1040	1034	1034	1036	1037	1037	1035	1036	1038	1037	1039	1040	1045	1048	1051	1051	1050	1061	1066	1077	1077	1060	1048	1047
6	1045	1037	1030	1029	1035	1031	1013	1015	1028	1036	1041	1041	1043	1049	1057	1066	1066	1063	1061	1069	1071	1069	1067	1054	1047
7 d	1017	1022	1028	1035	1034	1021	1010	1016	1019	1031	1036	1036	1037	1042	1050	1056	1052	1058	1049	1048	1047	1036	1043	1047	1036
8	1036	1033	1033	1028	1015	1022	1030	1030	1032	1036	1037	1038	1036	1042	1048	1057	1054	1049	1053	1051	1048	1037	1045	1046	1039
9	1046	1042	1036	1030	1025	1028	1025	1022	1025	1028	1028	1030	1031	1034	1039	1045	1045	1043	1043	1050	1052	1048	1051	1044	1037
10	1045	1031	1027	1030	1029	1028	1033	1031	1033	1039	1036	1034	1035	1039	1043	1047	1047	1046	1046	1052	1059	1064	1063	1058	1041
11 q	1051	1045	1045	1042	1040	1039	1034	1034	1035	1036	1039	1043	1048	1048	1049	1049	1048	1048	1057	1061	1061	1060	1058	1057	1047
12 q	1051	1046	1042	1039	1036	1035	1034	1033	1033	1033	1033	1037	1039	1042	1043	1044	1042	1040	1040	1040	1043	1049	1054	1052	1041
13 d	1042	1024	1033	1033	1033	1030	1026	1024	1026	1025	1026	1024	1033	1047	1058	1058	1073	1097	1081	1062	1058	1060	1037	1031	1043
14	1003	980	987	1012	1021	1026	1033	1033	1030	1030	1040	1047	1043	1045	1046	1058	1063	1049	1046	1045	1045	1042	1042	1029	1033
15	1010	1004	1013	1024	1010	1004	1021	1024	1027	1031	1034	1033	1040	1043	1051	1060	1060	1060	1058	1062	1053	1045	1039	1040	1035
16	1038	1036	1031	1013	1027	1031	1033	1034	1034	1035	1036	1037	1037	1037	1039	1037	1039	1043	1045	1046	1048	1028	1003	1015	1033
17	1019	1016	1021	1027	1023	1025	1030	1033	1031	1034	1037	1049	1048	1046	1050	1056	1051	1052	1055	1061	1043	1042	1041	1037	1039
18 q	1034	1033	1033	1034	1034	1034	1034	1034	1034	1036	1034	1035	1036	1037	1039	1040	1040	1042	1043	1045	1043	1041	1040	1039	1037
19	1036	1036	1036	1036	1036	1037	1039	1038	1038	1039	1037	1039	1036	1034	1034	1038	1048	1065	1055	1047	1042	1040	1040	1039	1040
20	1037	1036	1036	1036	1033	1033	1033	1030	1030	1029	1028	1033	1037	1046	1042	1042	1043	1040	1040	1040	1054	1072	1069	1041	1040
21 d	1018	1013	993	1005	1022	1028	1033	1033	1030	1030	1033	1035	1036	1045	1074	1105	1098	1087	1068	1058	1062	1056	1034	1006	1042
22 d	1022	1018	1030	1010	1009	1023	1027	1033	1037	1038	1043	1042	1050	1054	1061	1073	1115	1084	1068	1077	1041	1010	1010	1006	1041
23 d	1006	1014	1008	1024	1033	1031	1032	1039	1042	1046	1048	1049	1054	1064	1070	1070	1081	1100	1096	1077	1043	1048	1030	994	1046
24	1013	1033	1037	1025	1022	1030	1040	1040	1041	1042	1041	1046	1054	1055	1063	1072	1094	1070	1059	1045	1044	1045	1040	1024	1045
25	1022	1019	1027	1034	1039	1039	1040	1040	1036	1034	1034	1037	1045	1053	1063	1058	1057	1062	1072	1058	1056	1041	1019	1015	1042
26	1021	1032	1018	998	1004	1017	1024	1028	1028	1028	1030	1033	1034	1039	1051	1054	1051	1048	1047	1043	1041	1041	1041	1041	*1033*
27 q	1041	1042	1042	1041	1041	1041	1040	1042	1043	1041	1036	1034	1036	1040	1042	1043	1049	1052	1048	1042	1041	1041	1041	1040	1042
28	1037	1034	1033	1037	1039	1039	1040	1040	1040	1036	1030	1031	1031	1034	1035	1042	1048	1046	1045	1045	1044	1043	1040	1033	1038
Mean	1033	1029	1029	*1028*	1028	1030	1031	1032	1034	1035	1036	1037	1040	1044	1049	1054	*1057*	1057	1056	1055	1053	1049	1043	1037	1041

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

109 ESKDALEMUIR — FEBRUARY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force				Declination			Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.		′	h. m.	γ	γ	h. m.	γ				°A.
1 q	15 34	526	490	12 26	36	17 47 59·8	50·1	22 53	9·7	19 38	1055	1032	10 24	23	0,0,1,1,2,2,2,2	10	0	83·0
2	18 34	534	476	20 52	58	* * 56·8	48·8	22 4	*8·0*	21 6	1078	1032	9 55	46	1,1,1,1,2,1,3,3	13	0	82·9
3	3 34	572	441	19 32	131	13 54 62·5	37·5	4 21	25·0	19 36	1091	1006	4 13	85	2,4,4,3,3,2,4,3	25	1	83·0
4	1 38	526	483	13 37	43	13 13 61·2	41·7	2 14	19·5	17 33	1066	1030	3 34	36	3,2,2,2,2,2,2,1	16	0	82·9
5	17 50	539	464	21 47	75	13 58 62·1	34·0	21 16	28·1	21 9	1083	1033	2 30	50	2,2,2,2,2,3,4,4	21	1	82·9
6	24 0	540	457	10 49	83	6 29 62·7	40·0	2 30	22·7	20 6	1075	1006	6 49	69	3,3,3,3,2,3,3,3	23	1	82·9
7 d	20 48	570	437	14 56	*133*	13 44 62·1	36·1	1 28	26·0	17 22	1061	1005	6 2	56	4,4,3,3,4,4,4,3	29	1	82·9
8	0 11	555	471	11 48	84	† † 57·6	37·9	0 7	19·7	15 48	1060	1012	4 27	48	3,2,2,2,3,3,4,3	22	1	83·0
9	5 49	531	480	21 8	51	7 13 58·5	32·5	20 2	26·0	20 1	1058	1021	7 35	37	3,3,2,1,2,2,4,3	20	1	83·1
10	18 12	530	488	23 8	42	1 22 60·5	48·3	23 17	12·2	22 0	1066	1022	1 55	44	3,2,2,2,2,1,2,3	17	0	83·1
11 q	0 31	527	488	20 42	39	18 10 56·7	46·9	19 7	9·8	19 0	1064	1031	6 55	33	2,1,2,1,2,2,3,2	15	0	83·0
12 q	19 22	530	500	21 53	*30*	14 30 55·9	47·2	0 48	8·7	22 40	1055	1031	10 42	24	1,1,1,2,2,2,1,2	12	0	83·1
13 d	23 54	554	457	14 21	97	13 13 *66·5*	33·3	22 8	33·2	17 32	1105	1000	24 0	105	3,2,2,3,4,4,3,5	26	1	83·1
14	23 29	554	437	10 25	117	1 36 61·3	42·1	3 4	19·2	16 4	1070	*969*	1 55	101	4,3,3,4,3,4,2,3	26	1	83·1
15	18 21	541	457	10 39	84	0 34 60·4	40·3	19 19	20·1	19 18	1066	997	5 21	69	4,3,3,3,4,4,3,2	26	1	83·1
16	21 21	*580*	483	2 37	97	3 9 60·7	44·3	21 9	16·4	20 22	1050	998	22 31	52	3,3,1,1,1,2,2,4	17	1	83·1
17	20 26	564	451	10 40	113	14 37 59·3	34·3	19 26	25·0	19 32	1065	1015	4 29	50	3,2,3,4,3,2,4,3	24	1	83·1
18 q	7 8	529	487	11 59	42	13 58 55·9	45·1	19 41	10·8	19 39	1046	1030	1 52	*16*	1,1,2,2,2,1,3,2	14	0	83·1
19	0 1	526	475	17 5	51	12 56 55·0	44·1	17 14	10·9	17 13	1070	1033	13 50	37	1,1,1,1,1,3,2,1	11	0	83·0
20	19 42	537	472	21 33	65	10 12 57·5	37·9	21 38	19·6	22 2	1078	1025	10 29	53	1,1,1,2,2,2,3,3	15	1	82·9
21 d	16 1	567	*434*	21 48	*133*	13 15 63·0	33·7	15 58	29·3	15 56	*1153*	984	2 34	*169*	3,2,2,2,4,5,4,4	26	1	82·9
22 d	20 54	576	448	16 7	128	14 41 62·5	*23·3*	16 35	*39·2*	16 31	1135	997	3 43	138	3,4,3,3,4,5,5,4	31	1	82·9
23 d	20 2	560	438	23 38	122	2 4 62·9	24·4	18 29	38·5	17 50	1113	991	23 45	122	4,3,3,3,4,4,5,5	31	1	82·9
24	19 16	564	448	16 9	116	13 17 60·3	35·2	16 28	25·1	16 31	1103	995	0 1	108	2,2,2,3,3,4,4,4	24	1	82·9
25	22 2	579	459	18 25	120	13 8 58·8	34·7	18 33	24·1	18 31	1084	1012	23 31	72	3,2,2,3,3,3,4,4	24	1	82·8
26	15 37	534	463	10 41	71	11 33 60·2	45·8	5 30	14·4	15 13	1056	994	3 31	62	2,3,2,3,2,3,3,0	18	1	82·8
27 q	16 43	533	491	9 57	42	13 0 55·8	46·7	17 37	9·1	17 51	1054	1031	11 32	23	0,0,0,1,1,2,2,1	7	0	82·8
28	23 20	559	464	11 19	95	14 10 58·5	46·9	9 38	11·6	16 33	1051	1029	2 6	22	2,1,1,3,2,2,1,3	15	0	82·8
Mean	- -	548	466	- -	82	- - 59·8	39·8	- -	20·1	- -	1075	1013	- -	63	-	-	0·64	83·0

q denotes an international quiet day and d an international disturbed day.

* * 11h.41m. and 11h.51m. † † 13h.25m. and 13h.30m.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

110 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	521	510	509	506	533	542	397	461	393	381	491	475	510	701	998	738	522	1089	693	456	406	331	333	347	*535*
2	391	355	358	389	394	397	404	398	393	440	421	451	449	463	463	466	483	491	468	470	470	460	451	459	*433*
3	464	471	455	462	460	460	463	456	453	462	467	464	470	481	488	460	493	520	464	474	471	479	482	482	471
4	503	484	467	470	463	475	482	466	462	437	447	456	472	482	510	450	479	494	484	486	484	513	456	456	474
5	499	476	476	456	463	484	478	484	486	482	475	471	463	482	484	491	491	482	526	476	468	448	487	464	479
6	468	491	480	482	488	474	483	467	478	471	444	460	475	486	491	495	502	494	500	487	494	494	494	498	483
7	492	492	495	496	498	503	505	500	491	480	482	482	481	486	494	500	488	499	510	518	518	499	503	506	497
8	510	496	530	492	504	513	506	500	495	486	484	483	476	478	487	498	491	494	499	498	502	522	515	503	498
9	503	490	505	495	498	502	499	498	494	491	483	482	479	486	491	494	502	509	514	514	541	498	500	523	500
10 q	502	495	503	491	507	496	503	510	507	499	495	498	498	503	510	507	507	506	506	514	511	5.1	519	514	505
11	515	514	491	494	499	498	510	510	510	510	505	503	493	495	495	502	507	517	510	514	487	502	479	495	502
12	501	499	502	506	507	510	514	510	507	503	503	509	511	506	487	498	515	514	518	518	521	515	502	507	508
13	509	507	492	491	505	510	515	514	514	514	512	511	514	518	518	521	510	514	503	498	513	502	490	513	509
14 d	465	343	437	479	480	498	484	467	487	449	374	412	463	499	487	471	471	479	482	505	510	487	449	514	466
15	487	487	491	480	497	487	490	479	444	460	468	467	472	475	487	489	494	507	495	510	506	541	519	518	490
16 q	507	488	494	499	506	509	506	503	494	478	472	476	487	495	506	508	507	509	509	510	511	512	510	510	500
17 q	510	510	509	510	514	510	510	502	495	486	486	482	489	491	495	503	507	510	514	516	513	514	519	514	505
18	521	526	510	511	511	511	510	510	504	491	487	487	491	498	506	510	510	514	519	522	529	534	514	529	511
19	521	522	526	525	528	528	526	515	510	507	503	507	475	487	482	483	498	498	506	517	511	515	530	516	510
20	500	498	499	490	498	518	518	483	489	483	475	475	475	487	500	503	510	507	506	514	525	560	514	491	501
21	507	503	495	486	502	510	502	483	494	482	480	475	491	487	498	510	506	509	569	554	483	491	507	513	502
22	506	505	483	490	490	487	501	484	491	464	468	487	480	495	494	494	510	507	525	530	502	502	518	502	496
23	510	507	507	510	507	508	514	506	502	489	481	479	488	487	502	506	502	518	487	509	513	565	530	498	505
24	493	501	502	500	505	506	506	502	493	483	481	487	489	493	501	498	498	509	517	522	518	506	515	509	501
25	517	513	509	505	508	509	510	509	505	481	489	495	498	497	501	508	517	511	509	513	514	516	517	517	507
26 q	517	513	516	513	512	513	506	509	507	492	488	489	498	510	509	514	517	514	513	520	520	517	518	517	510
27 q	515	514	513	516	517	517	517	509	501	489	486	486	498	503	506	517	517	517	521	524	529	529	533	536	513
28 d	544	528	493	506	520	536	538	521	516	451	431	473	513	477	517	497	526	529	486	474	490	488	470	489	501
29	483	497	513	501	498	502	481	485	486	476	472	481	488	493	481	512	512	525	521	521	513	470	481	485	495
30 d	474	481	486	454	482	493	510	489	447	467	465	467	470	475	481	513	567	545	544	520	460	412	377	259	472
31 d	386	279	426	414	509	461	462	478	455	435	416	373	466	490	486	481	482	505	509	515	521	493	497	501	460
Mean	495	484	489	488	497	499	495	491	484	475	*472*	476	485	497	511	504	505	*527*	514	507	502	498	491	490	495

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

111 ESKDALEMUIR (D) — 12° + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	47·2	43·5	48·1	48·5	62·3	53·7	51·2	40·7	37·8	44·9	50·7	53·9	53·9	46·0	26·5	38·5	41·5	65·5	62·5	40·5	48·4	35·1	45·7	32·1	*46·6*
2	47·6	52·0	49·6	45·9	46·0	45·7	48·0	49·0	51·2	48·9	51·1	51·3	54·0	54·1	54·7	54·0	53·2	47·0	47·8	44·1	40·7	46·1	45·6	44·1	48·8
3	45·8	48·7	45·1	45·0	49·7	47·9	48·5	50·4	50·6	50·5	52·3	53·8	53·8	54·2	57·5	52·1	48·5	46·7	46·0	41·7	51·7	51·2	51·3	50·4	49·7
4	49·6	45·7	44·1	48·3	47·6	52·2	48·0	48·4	49·8	52·4	54·7	54·2	54·3	56·9	60·5	56·3	53·9	49·4	48·7	51·6	49·0	36·2	40·5	42·3	49·8
5	46·9	46·7	46·5	45·4	46·8	45·7	48·3	49·5	50·5	52·6	53·3	54·5	57·4	56·3	56·8	51·4	56·7	53·1	42·4	44·7	46·1	38·4	44·6	44·6	49·1
6	49·5	49·1	48·4	49·0	46·9	49·1	48·2	48·9	50·0	51·7	53·0	53·9	55·0	55·2	56·1	56·0	48·6	51·8	50·3	52·4	51·5	51·4	50·5	50·6	51·1
7	49·6	52·4	52·0	51·3	49·7	50·2	50·3	50·2	50·5	53·1	53·6	54·0	55·1	55·1	55·7	55·0	53·9	54·1	54·1	47·2	47·6	48·7	39·8	49·6	51·4
8	47·6	47·5	45·0	48·3	47·8	47·8	48·5	48·6	47·7	48·7	51·2	53·6	54·6	54·1	54·8	53·2	52·1	51·2	52·5	51·5	46·8	41·2	45·1	45·9	49·4
9	49·5	53·2	48·7	47·7	48·2	47·7	49·8	50·5	50·3	50·6	52·1	55·0	56·4	56·8	55·0	52·7	51·6	50·6	50·2	46·8	42·3	47·8	45·8	45·2	50·2
10 q	43·0	47·5	47·7	45·0	44·1	45·3	47·7	47·7	47·8	49·5	51·8	54·7	56·0	55·7	53·9	52·6	51·3	50·8	49·4	51·4	51·2	50·0	48·6	50·5	49·7
11	49·4	48·2	46·0	47·8	48·2	48·8	48·1	47·9	48·6	50·5	53·1	55·7	55·7	56·6	55·1	53·5	53·2	52·5	52·3	53·1	48·9	48·3	42·7	47·4	50·5
12	50·3	49·9	50·3	49·1	49·4	49·2	49·4	49·7	49·8	51·2	52·4	54·4	56·4	57·4	58·2	55·7	56·1	55·7	55·7	53·9	52·4	51·4	46·3	41·6	51·9
13	44·9	49·5	46·2	46·7	46·9	47·6	48·7	49·8	50·6	51·3	52·2	53·1	54·1	54·2	53·2	52·5	52·6	52·3	51·6	52·3	51·3	46·0	43·1	44·9	49·8
14 d	34·7	40·3	40·3	43·1	49·3	52·1	59·7	60·4	59·7	54·0	59·3	62·0	62·2	56·4	55·6	53·4	51·3	47·7	43·4	39·5	35·9	44·9	49·4	49·4	50·2
15	47·9	49·4	49·6	52·0	51·3	50·3	51·5	52·4	55·8	54·3	56·9	56·6	57·3	56·8	54·4	53·8	51·4	50·5	46·1	47·1	50·5	49·5	50·3	49·7	51·9
16 q	48·0	46·7	52·1	50·6	51·2	51·2	49·6	49·1	48·7	48·8	51·1	53·6	54·9	55·1	54·6	53·1	51·9	51·8	51·6	51·8	51·2	50·9	50·3	50·4	51·2
17 q	50·4	50·5	50·6	52·5	49·4	47·8	48·4	48·6	49·6	49·6	51·5	54·4	56·0	57·0	54·5	53·9	52·3	52·0	52·0	51·1	50·2	50·2	48·5	49·8	51·3
18	51·0	53·1	51·2	49·4	49·2	48·7	48·7	48·6	48·1	48·5	50·4	53·7	55·7	55·8	55·2	54·0	53·1	52·5	52·6	53·1	52·3	49·7	49·4	46·9	51·3
19	48·7	50·3	50·2	49·3	49·3	48·7	48·0	48·5	48·9	50·3	53·1	56·5	61·1	62·1	62·7	59·9	59·9	52·2	47·5	50·6	46·8	45·0	51·4	45·9	52·0
20	53·6	55·7	49·9	52·2	52·8	50·4	50·1	51·6	51·3	51·3	53·2	55·2	56·9	56·5	57·6	56·0	47·2	49·4	51·7	52·3	49·3	47·0	48·9	48·7	*52·0*
21	54·2	51·3	53·7	55·6	51·3	48·3	47·0	52·0	52·0	53·0	53·1	56·8	56·9	55·8	52·3	54·0	48·7	48·7	39·8	41·1	40·9	46·6	50·5	51·9	50·6
22	51·3	50·5	58·3	53·2	51·9	52·7	49·4	49·9	48·6	49·4	52·4	53·1	55·6	54·5	55·2	53·0	43·0	40·4	41·4	41·6	45·9	50·3	53·4	53·1	50·3
23	51·2	50·4	49·9	49·6	50·3	51·4	50·3	50·2	52·2	51·3	53·4	55·1	57·8	57·1	56·0	53·1	45·8	47·0	46·0	49·4	51·5	42·2	49·7	47·4	50·8
24	48·6	49·6	52·2	51·7	48·7	48·9	48·6	47·9	47·1	48·6	50·3	52·3	54·9	55·9	55·9	53·9	52·0	48·4	47·1	46·8	49·6	45·7	45·8	49·4	50·0
25	50·2	49·6	50·6	50·7	50·8	49·9	48·6	47·7	47·5	47·6	49·8	52·1	55·5	57·0	56·1	53·9	52·1	51·1	49·2	46·1	50·4	50·3	48·7	51·1	50·7
26 q	50·7	51·4	50·3	49·6	50·3	50·3	49·7	48·1	46·9	47·8	49·8	52·7	55·0	56·6	55·4	54·0	52·6	51·3	51·1	51·1	50·7	49·5	50·2	50·9	51·1
27 q	50·5	50·4	50·3	50·1	49·6	49·5	48·7	46·9	45·4	46·7	50·2	53·4	56·6	57·1	55·8	53·9	52·2	51·2	51·2	51·4	51·4	51·4	51·5	51·5	51·1
28 d	50·5	43·1	35·9	44·5	47·7	44·1	46·1	45·0	43·4	44·9	58·2	59·5	64·0	66·8	66·5	66·6	57·4	57·8	47·9	46·0	39·6	47·0	42·5	49·0	50·6
29	48·5	45·7	45·8	45·0	46·0	47·0	49·4	47·5	46·2	47·9	49·9	53·4	56·8	59·2	57·6	58·6	50·5	48·6	48·5	42·3	42·1	44·4	41·5	45·6	48·7
30 d	49·3	50·5	52·1	45·4	49·7	52·4	50·6	53·0	50·9	50·3	50·5	51·4	54·0	58·2	57·4	57·1	49·5	44·9	53·7	49·8	35·7	39·6	32·4	16·2	48·1
31 d	45·7	34·6	32·3	44·0	43·7	46·3	48·7	50·2	48·6	49·6	50·3	52·4	52·0	53·3	54·3	53·0	52·1	52·4	53·0	51·5	44·3	48·4	49·3	47·7	48·2
Mean	48·6	48·6	48·2	48·6	49·2	49·1	49·3	49·3	49·2	50·0	52·4	54·4	56·1	*56·3*	55·3	54·1	51·5	50·9	49·6	48·2	47·3	46·6	46·9	*46·6*	50·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

112 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MARCH 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1033	1032	1032	1032	987	944	945	944	992	1040	1081	1092	1050	1131	774	579	669	531	915	1089	1196	1162	1114	1108	*978*
2	1139	1101	1061	1086	1085	1081	1081	1076	1075	1081	1081	1084	1082	1082	1082	1091	1109	1121	1102	1099	1073	1058	1036	1054	*1084*
3	1053	1027	1032	1043	1045	1046	1053	1056	1054	1051	1054	1063	1067	1069	1076	1093	1113	1115	1097	1085	1069	1065	1063	1064	1065
4	1048	1026	1030	1045	1042	1017	1018	1036	1044	1049	1058	1054	1054	1055	1072	1099	1094	1093	1087	1075	1073	1057	1021	1021	1053
5	984	1016	1037	1013	1020	1033	1043	1048	1049	1052	1052	1052	1057	1059	1092	1091	1090	1105	1094	1085	1090	1081	1031	1035	1055
6	1039	1033	1036	1050	1052	1052	1048	1051	1052	1053	1055	1056	1053	1058	1066	1076	1094	1102	1095	1079	1072	1066	1064	1060	1061
7	1059	1058	1048	1052	1057	1057	1057	1058	1056	1052	1051	1052	1052	1055	1060	1066	1072	1070	1070	1075	1061	1062	1040	1037	1057
8	1025	1044	1036	1042	1047	1047	1048	1051	1049	1048	1043	1042	1045	1049	1055	1064	1070	1070	1072	1077	1078	1057	1048	1046	1052
9	1039	1019	1024	1040	1046	1047	1048	1049	1051	1047	1045	1043	1043	1048	1054	1061	1060	1059	1060	1062	1048	1049	1046	1017	1046
10 q	1015	1021	1018	1025	1031	1038	1042	1043	1045	1044	1041	1040	1042	1047	1052	1055	1058	1059	1058	1054	1054	1055	1052	1051	1043
11	1043	1036	1042	1046	1047	1047	1045	1045	1044	1042	1042	1040	1043	1046	1048	1050	1050	1053	1056	1060	1082	1088	1073	1054	1051
12	1056	1060	1060	1058	1054	1052	1049	1046	1045	1042	1040	1038	1040	1047	1057	1057	1057	1059	1061	1063	1063	1060	1064	1059	1054
13	1045	1039	1045	1048	1047	1045	1043	1044	1044	1045	1043	1040	1040	1045	1051	1055	1057	1058	1067	1081	1073	1042	1051	1049	1050
14 d	1021	896	912	1009	1012	1018	1015	1022	1040	1055	1077	1079	1099	1123	1091	1093	1091	1098	1094	1075	1058	1050	1006	977	1042
15	1033	1048	1052	1051	1047	1050	1049	1049	1048	1048	1048	1051	1058	1060	1062	1070	1069	1070	1075	1067	1063	1048	1030	1025	1053
16 q	1027	1031	1041	1047	1048	1046	1047	1051	1048	1045	1042	1043	1047	1052	1057	1060	1060	1057	1056	1055	1054	1054	1054	1054	1049
17 q	1052	1053	1053	1051	1052	1052	1052	1052	1048	1047	1043	1041	1040	1044	1048	1051	1053	1055	1054	1054	1056	1056	1052	1051	1050
18	1049	1037	1042	1046	1048	1049	1050	1051	1048	1048	1042	1035	1034	1039	1045	1052	1055	1053	1052	1050	1048	1048	1048	1027	1046
19	1040	1043	1045	1046	1046	1045	1044	1046	1043	1040	1034	1033	1047	1060	1085	1083	1072	1078	1081	1065	1063	1052	1034	1033	1052
20	1017	995	1021	1031	1028	1035	1040	1040	1039	1040	1042	1045	1051	1064	1071	1083	1118	1102	1081	1067	1058	1038	1030	1027	1048
21	1003	1024	1028	1005	1027	1034	1038	1041	1040	1042	1045	1048	1055	1065	1072	1070	1087	1081	1078	1046	1048	1048	1043	1024	1045
22	1038	1043	1019	997	1013	1013	1034	1046	1048	1047	1047	1049	1058	1061	1063	1072	1100	1115	1099	1067	1061	1060	1051	1028	1051
23	1032	1042	1048	1046	1046	1047	1048	1052	1048	1049	1050	1049	1051	1051	1055	1066	1087	1093	1085	1073	1064	1050	1018	1024	1053
24	1039	1046	1043	1042	1043	1047	1048	1051	1052	1051	1051	1046	1045	1046	1049	1058	1064	1070	1066	1059	1055	1051	1046	1047	1051
25	1044	1043	1046	1047	1046	1045	1048	1049	1049	1049	1047	1040	1037	1040	1047	1051	1054	1058	1063	1063	1057	1055	1053	1051	1049
26 q	1051	1051	1046	1046	1045	1045	1048	1052	1051	1048	1045	1040	1042	1045	1050	1054	1057	1058	1055	1052	1052	1054	1052	1052	1050
27 q	1052	1052	1052	1051	1049	1049	1052	1053	1051	1046	1039	1033	1030	1034	1042	1046	1048	1050	1050	1048	1046	1048	1048	1047	1047
28 d	1041	1006	1011	1024	1033	1035	1037	1043	1043	1041	1033	1033	1036	1054	1089	1139	1150	1157	1137	1111	1081	1018	1035	1018	1059
29	998	1017	1031	1025	1044	1051	1053	1056	1058	1057	1052	1050	1046	1056	1064	1072	1105	1112	1126	1096	1055	992	997	1007	1051
30 d	1019	995	970	974	1000	1018	1031	1039	1042	1043	1050	1055	1062	1069	1081	1078	1099	1148	1157	1141	1045	989	989	867	1040
31 d	892	858	913	910	953	995	1021	1037	1048	1056	1063	1087	1082	1066	1067	1073	1072	1069	1070	1078	1075	1069	1065	1069	1029
Mean	1033	*1025*	1028	1033	1037	1038	1041	1044	1047	1048	1049	1050	1051	1059	1054	1055	1066	1065	*1075*	1073	1067	1054	1044	1035	1049

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

113 ESKDALEMUIR — MARCH 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force				Declination			Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m. ′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	17 33	*1415*	93	21 20	*1322*	17 0 *235·8*	*−30·6*	14 36	*266·4*	14 10	*>1526*	*−81*	18 0	*>1607*	2,4,6,6,9,9,9,7	52	2	82·8
2	16 55	533	303	2 4	230	1 37	60·9	37·1	19 49	23·8	0 19	1155	1028	22 13	127	5,3,3,4,3,4,4,4	30	1	82·9
3	17 18	619	425	15 38	194	14 35	59·4	36·2	19 20	23·2	17 16	1130	1022	1 35	108	3,3,2,3,3,6,4,1	25	1	82·9
4	21 29	586	379	9 56	207	14 25	62·0	21·3	21 22	40·7	15 27	1106	1000	24 0	106	4,3,3,4,4,4,4,3,5	30	1	82·9
5	18 9	578	409	22 0	169	14 24	62·8	33·6	21 17	29·2	18 2	1125	980	0 22	145	3,3,3,2,4,4,5,5	29	1	82·9
6	18 11	522	422	10 49	100	15 17	57·8	40·6	18 8	17·2	18 5	1117	1029	2 3	88	3,2,3,3,2,3,4,1	21	1	82·9
7	20 0	565	454	22 50	111	14 37	56·4	36·8	19 50	19·6	19 37	1082	1028	24 0	54	2,2,1,2,2,3,4,4	20	1	82·9
8	21 5	581	462	13 5	119	14 20	56·7	34·1	21 1	22·6	20 37	1083	1021	0 33	62	4,3,1,3,3,3,3,5	25	1	82·9
9	20 1	578	471	1 19	107	13 22	57·4	36·1	19 55	21·3	19 44	1065	1010	23 32	55	3,1,2,2,1,2,4,3	18	1	83·0
10 q	0 1	532	475	0 52	57	12 0	56·7	41·2	0 1	15·5	18 5	1060	1010	0 10	50	3,2,3,1,1,2,2,2	16	0	83·0
11	21 47	545	424	22 42	121	13 15	57·5	32·4	22 6	25·1	22 1	1094	1040	11 41	54	3,1,2,2,2,2,3,5	20	1	83·1
12	18 2	530	468	14 58	62	14 8	60·1	36·2	23 8	23·9	22 51	1069	1036	11 52	33	1,1,1,2,4,3,2,4	18	0	83·0
13	15 23	549	475	22 49	74	19 37	55·6	37·5	22 54	18·1	20 1	1085	1037	21 24	48	3,2,2,2,2,3,3,3	20	1	83·0
14 d	23 12	565	265	1 19	300	7 56	68·3	24·8	0 45	43·5	13 2	1136	824	2 8	312	6,4,4,5,4,3,5,5	36	2	83·0
15	21 27	569	420	9 0	149	12 40	59·3	39·9	18 49	19·4	18 18	1078	1014	0 1	64	3,3,3,4,2,3,3,4	25	1	83·0
16 q	14 28	521	467	10 47	54	14 28	55·7	43·4	0 57	12·3	15 36	1062	1024	0 1	38	3,1,1,1,2,2,2,0	12	0	83·0
17 q	22 20	531	479	12 13	52	13 17	58·4	47·1	22 21	11·3	21 6	1058	1039	12 21	*19*	1,2,2,2,2,2,1,1,2	13	0	83·0
18	21 18	557	483	11 30	74	13 6	56·6	43·3	23 35	13·3	22 22	1058	1018	23 11	40	3,0,1,1,1,2,2,3	13	0	83·1
19	22 17	550	440	14 50	110	13 58	68·1	39·5	20 59 / 21 2	28·6	14 52	1095	1029	23 8	66	2,1,2,3,4,3,3,4	22	1	83·1
20	21 31	578	441	12 22	137	0 34	62·3	36·9	16 48	25·4	16 43	1137	990	1 15	147	4,3,3,3,4,5,3,4	29	1	83·1
21	18 53	671	456	11 19	215	0 3	61·2	20·3	18 42	40·9	18 41	1093	1000	0 21	93	3,3,3,3,4,4,6,4	30	1	83·2
22	18 1	636	447	17 53	189	2 59	63·6	17·1	18 0	46·5	17 58	1130	986	3 22	144	4,4,3,4,3,5,6,3	32	1	83·2
23	21 40	619	448	16 38	171	12 6	62·1	31·9	21 38	30·2	17 8	1100	1014	22 23	86	1,2,2,3,3,4,3,5	23	1	83·4
24	21 50	542	467	9 51	75	14 15	56·6	36·5	21 43	20·1	17 39	1071	1030	0 2	41	2,2,2,2,2,3,3,4	20	1	83·4
25	16 51	528	471	9 53	57	13 32	57·9	43·2	19 14	14·7	19 10	1065	1037	12 9	28	2,2,1,2,2,2,3,2	16	0	83·4
26 q	0 45 / 20 18	525	482	11 18	*43*	13 36	57·0	46·3	8 22	*10·7*	17 3	1059	1039	11 48	20	1,1,2,1,1,2,1,1	10	0	83·5
27 q	23 10	540	482	11 6	58	12 49	57·6	45·2	8 38	12·4	7 21	1054	1029	12 17	25	0,0,0,0,1,1,2,2	6	0	83·5
28 d	21 0	573	398	20 51	175	15 3	76·2	24·9	20 30	51·3	17 49	1246	987	21 9	259	4,3,3,4,5,5,5,5	34	2	83·5
29	20 42	614	392	21 1	222	13 46	60·4	16·0	20 40	44·4	19 2	1165	964	22 40	201	4,3,3,3,4,4,6,5	32	2	83·5
30 d	16 43	661	154	23 38	507	22 0	114·7	1·0	23 36	113·7	19 26	1188	782	22 0	406	3,4,4,3,4,6,6,8	38	2	83·4
31 d	17 18	571	*8*	1 9	563	0 56	62·0	16·2	0 1	45·8	11 50	1099	738	1 9	361	7,6,4,5,4,4,3,3	36	2	83·4
Mean	− −	593	402	− −	191	− −	67·6	31·2	− −	36·5	− −	1116	958	− −	158	−	−	0·94	83·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

114 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	505	486	490	493	492	493	493	489	482	474	470	470	474	483	486	498	498	501	502	506	513	533	520	507	494
2	490	513	498	508	509	509	511	498	486	479	477	478	489	493	501	509	501	505	510	519	510	521	501	506	501
3	510	505	493	495	512	501	501	497	493	481	481	485	487	501	509	509	503	509	517	506	513	506	506	525	502
4	506	506	506	506	513	509	506	499	493	481	474	480	488	498	502	506	507	509	513	515	513	513	513	518	503
5	510	509	509	509	506	509	517	511	498	490	482	483	483	494	501	512	513	509	515	518	518	512	506	508	505
6	509	502	523	509	506	495	517	516	513	501	494	487	490	493	503	520	517	524	524	525	525	517	513	517	510
7 d	517	517	518	517	518	518	520	521	521	512	488	480	482	498	518	512	532	524	529	532	520	513	496	524	514
8	520	513	512	512	513	513	517	517	513	506	498	492	488	495	498	518	517	517	522	525	527	526	524	544	514
9	525	513	520	495	493	524	527	520	506	495	493	483	493	501	485	494	513	520	528	525	525	520	521	525	510
10 d	517	517	513	512	516	517	517	477	493	492	483	467	478	490	502	532	540	527	517	523	509	518	497	501	506
11	502	497	506	512	498	513	514	475	485	463	483	482	487	479	501	506	514	529	521	533	532	509	529	516	504
12	517	512	501	498	523	508	509	518	501	487	478	486	478	498	508	517	529	535	529	522	520	521	524	532	510
13	520	521	512	516	515	517	513	508	501	488	480	481	491	501	506	508	518	524	524	517	521	520	519	524	510
14 q	520	516	515	515	510	512	509	510	509	494	488	485	488	504	509	517	524	520	518	520	520	520	520	517	511
15	517	517	517	520	522	525	528	527	520	510	502	495	505	512	512	528	524	532	535	538	536	540	528	524	*521*
16	540	527	511	519	522	524	525	521	513	506	487	460	480	494	504	514	512	520	524	525	527	527	527	526	514
17	524	523	518	517	517	519	521	527	519	509	500	481	492	508	510	513	525	533	519	524	523	521	520	523	516
18	535	512	511	507	510	518	520	517	509	503	493	496	485	480	499	516	508	513	519	529	525	524	540	504	511
19 d	516	512	521	524	527	496	511	453	435	492	474	464	458	474	460	510	506	546	527	533	509	520	535	519	501
20	521	504	515	506	509	516	514	499	499	502	484	472	474	493	491	507	512	524	530	523	523	531	530	515	508
21	497	505	507	505	514	509	509	511	504	504	492	484	494	487	505	511	518	529	534	527	541	523	524	524	511
22 q	525	520	520	516	515	509	509	518	516	501	488	487	489	496	508	501	515	521	527	528	528	528	527	523	513
23 q	524	523	523	520	520	521	517	514	508	497	488	475	477	496	508	515	520	528	535	532	531	528	529	530	515
24 d	530	531	528	525	528	528	527	528	505	403	434	482	516	535	531	528	550	567	552	515	470	480	484	477	511
25 d	477	443	496	478	469	454	461	478	477	454	456	476	482	489	493	542	559	535	521	543	509	512	504	507	*492*
26	493	485	493	506	482	491	504	505	492	454	488	489	485	484	490	504	515	520	513	519	518	516	512	496	498
27 q	493	497	504	505	503	504	505	500	497	492	486	487	492	501	501	502	518	524	523	520	518	513	509	512	504
28	524	513	521	504	521	508	504	508	504	494	491	489	472	492	497	524	540	535	527	543	508	491	479	504	508
29	493	440	476	516	498	493	486	472	480	483	485	485	489	493	495	497	501	508	510	512	515	512	501	508	494
30 q	504	510	504	500	500	508	505	501	496	485	477	475	483	489	498	506	513	512	513	509	511	513	511	509	501
Mean	513	506	509	509	509	509	511	505	499	488	483	*481*	486	495	501	513	519	523	523	*523*	519	518	515	515	507

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

115 ESKDALEMUIR (D) — 12° + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	47·8	46·9	48·5	50·4	48·7	48·4	47·8	46·7	45·8	47·8	50·3	54·1	54·9	55·9	54·9	52·4	52·1	51·4	50·5	49·9	49·7	49·7	47·0	46·2	49·9
2	48·5	50·2	45·1	46·6	45·9	45·9	46·7	46·0	47·8	49·2	51·2	54·7	58·2	60·7	58·1	56·3	54·3	52·8	52·0	51·5	50·2	42·0	45·1	46·6	50·2
3	47·8	47·7	47·2	51·2	45·2	43·9	47·0	46·4	46·1	47·8	50·4	53·4	56·5	57·9	58·7	54·4	55·1	53·5	53·2	48·7	46·1	49·5	49·7	45·1	50·1
4	47·3	47·5	49·3	49·2	48·5	49·4	49·6	48·4	46·9	48·6	51·6	54·7	56·9	56·0	55·2	53·4	52·2	50·7	50·3	50·4	49·8	49·4	48·5	49·7	50·6
5	49·4	49·5	48·8	48·6	48·6	49·2	48·5	45·9	45·7	46·1	49·2	52·8	55·8	57·5	56·2	54·5	52·5	50·7	50·2	49·8	50·3	48·7	46·6	48·6	50·2
6	47·3	47·8	46·9	44·2	43·6	46·7	47·9	46·0	46·0	47·0	49·6	52·7	56·6	57·6	57·5	56·6	54·1	52·4	51·3	50·8	50·6	48·7	44·4	48·1	49·8
7 d	50·0	49·9	49·6	49·7	49·5	48·7	48·1	47·0	46·0	46·8	50·1	55·0	56·9	58·6	59·2	55·9	54·0	53·2	52·6	51·5	45·8	34·9	38·9	37·2	49·5
8	44·2	46·3	48·8	49·6	49·3	48·7	47·7	46·4	45·8	46·2	48·6	51·9	54·8	55·9	55·8	54·7	54·1	52·4	48·7	50·4	50·8	50·7	48·5	43·3	49·7
9	43·7	46·5	48·9	46·9	52·4	53·2	51·1	48·0	47·0	47·6	50·1	52·3	56·1	59·7	59·4	57·4	54·0	52·3	51·2	51·3	51·1	50·3	49·3	48·7	51·2
10 d	49·4	49·6	50·2	52·3	50·3	49·5	49·8	51·6	49·0	47·1	48·6	51·0	54·2	56·3	56·7	55·8	47·9	54·0	47·5	44·4	50·3	48·8	33·4	44·3	49·7
11	49·7	53·2	53·3	48·4	48·7	49·2	47·5	49·5	49·5	47·8	47·9	50·7	54·8	56·6	55·9	55·2	54·0	53·0	47·1	45·7	43·5	46·7	48·0	48·9	50·2
12	51·6	51·2	53·7	54·3	54·7	56·1	49·8	48·7	44·3	45·2	47·5	53·0	54·6	56·2	56·1	54·0	50·4	51·2	50·5	50·3	50·5	50·4	50·4	47·8	51·4
13	48·0	54·7	50·5	49·4	49·6	48·4	47·5	45·1	44·4	44·4	46·8	50·2	53·3	55·9	56·0	53·3	52·2	51·2	49·4	49·5	48·5	48·5	49·4	50·1	49·8
14 q	51·3	50·3	49·5	48·7	48·6	50·4	49·3	48·0	46·5	47·6	49·4	51·7	54·7	55·9	54·5	53·0	51·7	50·6	49·4	49·4	50·2	50·2	49·9	49·7	50·4
15	49·6	49·4	49·3	49·1	48·7	48·6	47·9	46·8	45·9	46·0	48·8	51·4	54·8	57·0	55·0	54·1	53·3	52·3	51·4	50·9	51·3	51·2	50·4	49·6	50·5
16	50·3	43·8	45·8	47·6	47·8	48·1	48·5	47·7	46·9	46·9	50·2	54·4	57·2	58·0	55·5	54·1	53·2	51·5	50·5	50·0	50·2	49·9	49·7	49·9	50·3
17	50·1	49·6	49·7	50·2	50·7	47·9	47·0	46·5	45·9	47·5	49·8	51·8	54·3	56·4	56·6	55·4	55·1	54·4	51·5	50·9	50·2	49·9	49·9	50·0	50·9
18	50·9	49·0	46·3	48·8	48·6	48·4	48·1	47·9	47·1	47·3	49·4	52·6	55·2	55·4	55·2	53·0	51·1	50·3	49·6	50·5	51·0	46·0	36·0	48·9	49·4
19 d	47·8	49·7	51·9	47·9	49·8	63·9	68·1	55·1	52·9	53·5	52·7	52·9	55·0	55·5	54·7	53·6	52·8	52·4	44·5	47·0	47·6	47·5	49·2	49·4	*52·3*
20	49·6	52·6	51·6	49·4	48·5	47·3	47·9	49·3	47·8	46·9	48·1	51·7	54·4	55·9	55·6	53·9	52·9	51·6	50·9	49·3	45·4	44·3	46·7	43·3	49·8
21	47·8	53·1	52·2	52·5	49·1	50·5	49·8	47·3	46·0	46·9	49·6	52·7	55·9	55·9	54·9	53·4	52·6	50·9	49·3	48·2	49·0	49·3	49·7	49·8	50·7
22 q	49·8	49·3	49·4	48·8	48·7	48·8	49·9	46·2	44·5	46·3	48·9	52·1	54·7	55·7	54·8	52·8	52·2	51·2	48·0	49·4	49·7	50·0	48·6	49·4	50·0
23 q	49·4	48·8	48·9	48·5	47·9	47·6	46·3	45·7	45·3	46·2	48·7	51·3	54·0	55·0	55·0	54·0	53·1	52·1	51·1	50·5	50·3	50·2	50·3	50·4	50·0
24 d	49·5	48·9	48·4	47·5	46·8	45·5	44·8	43·9	44·0	49·3	54·0	55·7	60·5	65·6	61·1	61·2	64·2	56·5	37·7	46·3	41·8	44·0	42·5	40·9	50·0
25 d	39·5	43·3	38·2	40·5	44·8	50·6	53·1	50·4	48·8	48·7	52·4	53·3	56·0	57·6	56·6	55·2	49·4	53·8	47·7	46·1	46·9	48·8	50·2	46·7	49·1
26	49·6	50·6	50·4	48·5	48·5	50·5	48·7	47·1	47·1	47·2	46·8	47·8	51·3	53·5	53·8	53·0	52·2	50·8	49·0	49·0	49·3	49·0	45·2	44·1	49·3
27 q	46·0	47·7	49·2	48·5	47·7	47·6	46·2	45·8	45·1	44·9	47·4	50·4	52·3	53·9	53·9	53·2	52·9	51·1	50·1	49·0	49·5	48·3	46·9	47·5	49·0
28	47·9	49·2	49·3	49·4	49·7	44·6	46·0	46·1	46·9	48·8	51·9	54·7	54·8	57·1	57·3	52·8	49·5	51·4	49·2	47·7	41·6	42·1	39·6	43·2	48·8
29	36·0	30·0	43·1	40·5	44·8	46·0	44·9	46·0	49·4	48·7	49·1	50·4	52·4	53·2	53·1	52·3	52·1	51·4	50·6	50·2	49·5	49·2	47·8	48·5	*47·5*
30 q	46·5	47·4	46·0	45·1	45·9	46·7	46·7	46·8	47·0	46·9	49·0	50·6	53·0	54·2	54·0	53·3	52·7	51·4	50·0	49·3	48·9	49·1	49·2	49·1	49·1
Mean	47·9	48·5	48·7	48·4	48·4	49·0	48·7	47·4	46·7	47·4	49·6	52·4	55·1	*56·7*	56·0	54·4	52·9	52·1	49·5	49·3	48·7	47·9	*46·7*	47·2	50·0

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

116 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — APRIL 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1063	1063	1062	1058	1058	1059	1060	1059	1060	1060	1057	1054	1054	1054	1058	1063	1066	1065	1064	1063	1061	1049	1036	1034	1057
2	1035	1022	1032	1037	1039	1040	1042	1042	1040	1041	1042	1040	1040	1048	1063	1072	1068	1060	1059	1058	1060	1061	1054	1052	1048
3	1046	1051	1048	1030	1032	1037	1043	1043	1042	1041	1038	1036	1039	1042	1054	1078	1083	1076	1066	1070	1067	1063	1063	1055	1052
4	1054	1053	1051	1047	1050	1051	1051	1051	1052	1048	1045	1042	1041	1043	1050	1054	1057	1059	1059	1058	1058	1058	1058	1052	1052
5	1048	1051	1053	1052	1053	1048	1045	1048	1048	1045	1041	1042	1040	1041	1045	1049	1056	1058	1059	1059	1059	1061	1060	1046	1050
6	1048	1050	1036	1040	1045	1045	1035	1036	1038	1041	1040	1037	1037	1042	1049	1057	1060	1060	1060	1059	1059	1063	1064	1056	1048
7 d	1052	1052	1052	1051	1050	1051	1052	1051	1048	1038	1036	1034	1032	1033	1039	1046	1052	1054	1054	1054	1063	1082	1049	1001	1047
8	1001	1028	1040	1043	1046	1047	1051	1054	1052	1048	1044	1040	1042	1046	1048	1053	1059	1062	1064	1061	1056	1055	1054	1043	1047
9	1031	1036	1040	1039	1037	1030	1036	1040	1043	1045	1039	1039	1038	1046	1058	1059	1067	1064	1060	1055	1053	1054	1054	1050	1046
10 d	1050	1051	1051	1046	1046	1046	1046	1044	1046	1051	1050	1044	1038	1040	1049	1070	1100	1092	1096	1082	1069	1060	1055	1039	1057
11	1036	1036	1034	1042	1045	1046	1048	1047	1046	1052	1051	1048	1046	1051	1056	1064	1066	1068	1076	1070	1058	1057	1047	1047	1052
12	1044	1044	1034	1021	1021	1019	1034	1040	1047	1046	1042	1037	1037	1040	1051	1060	1065	1064	1060	1059	1057	1064	1052	1047	1045
13	1046	1038	1042	1047	1048	1049	1052	1053	1052	1045	1039	1034	1038	1045	1057	1060	1060	1059	1059	1056	1054	1052	1051	1047	1049
14 q	1045	1048	1051	1052	1051	1046	1046	1042	1039	1036	1036	1034	1031	1037	1042	1046	1049	1052	1054	1054	1052	1051	1050	1051	1046
15	1052	1052	1052	1051	1049	1049	1048	1046	1045	1039	1033	1028	1026	1033	1042	1045	1047	1049	1051	1049	1046	1046	1049	1049	1045
16	1044	1031	1039	1045	1046	1046	1048	1048	1044	1036	1034	1035	1039	1049	1057	1054	1057	1057	1057	1055	1052	1051	1049	1048	1047
17	1048	1048	1050	1051	1048	1048	1048	1046	1045	1040	1038	1042	1040	1042	1046	1048	1051	1057	1061	1057	1054	1054	1052	1051	1049
18	1040	1024	1031	1040	1045	1046	1048	1050	1048	1048	1045	1039	1042	1049	1057	1063	1075	1070	1063	1060	1057	1054	1024	1030	1048
19 d	1040	1040	1029	1030	1026	994	970	993	1016	1027	1039	1041	1042	1051	1063	1069	1072	1077	1099	1086	1075	1064	1039	1042	1043
20	1045	1043	1035	1040	1049	1051	1049	1050	1050	1049	1048	1044	1044	1051	1061	1059	1059	1059	1060	1064	1064	1052	1042	1027	1050
21	1033	1030	1030	1037	1040	1039	1040	1044	1045	1044	1046	1048	1048	1052	1052	1055	1059	1059	1064	1066	1054	1050	1051	1052	1047
22 q	1050	1051	1051	1052	1052	1052	1050	1048	1044	1042	1040	1036	1034	1036	1041	1048	1051	1055	1059	1056	1052	1052	1050	1051	1048
23 q	1051	1050	1049	1049	1050	1050	1051	1052	1050	1047	1042	1042	1042	1042	1042	1042	1044	1048	1051	1050	1050	1052	1051	1049	1048
24 d	1048	1048	1048	1048	1048	1048	1046	1040	1035	1040	1030	1030	1033	1055	1169	1150	1168	1186	1140	1109	1091	1064	1021	1021	*1071*
25 d	1010	967	979	983	996	994	1000	1019	1033	1039	1043	1045	1048	1054	1056	1073	1085	1082	1091	1077	1066	1053	1030	1039	*1036*
26	1037	1028	1016	1033	1031	1030	1036	1042	1044	1051	1052	1048	1047	1049	1052	1052	1057	1064	1067	1064	1061	1055	1048	1043	1046
27 q	1040	1045	1050	1052	1054	1053	1054	1052	1046	1043	1045	1046	1046	1048	1054	1055	1058	1064	1070	1070	1065	1060	1060	1057	1054
28	1050	1049	1044	1036	1019	1027	1037	1042	1042	1042	1040	1039	1041	1047	1058	1069	1081	1082	1083	1078	1077	1068	1075	1070	1054
29	1055	997	983	1000	1033	1048	1053	1053	1043	1039	1041	1042	1048	1051	1054	1054	1056	1058	1058	1058	1058	1058	1060	1058	1044
30 q	1057	1051	1048	1048	1051	1052	1053	1054	1052	1052	1052	1051	1047	1048	1049	1050	1052	1057	1059	1058	1056	1054	1054	1054	1052
Mean	1043	1039	*1039*	1040	1042	1041	1042	1044	1045	1044	1042	1041	1041	1045	1056	1061	1066	1067	*1067*	1064	1060	1057	1050	1045	1049

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

117 ESKDALEMUIR — APRIL 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	21 28	540	462	11 40	78	13 9	56·7	44·9	22 40 / 23 52	11·8	0 1	1068	1033	23 9	35	3,1,1,2,2,2,2,3	16	0	83·4
2	21 28	537	474	10 53	63	13 52	62·2	37·7	21 26	24·5	15 48	1072	1019	1 27	53	3,2,2,1,2,3,2,3	18	0	83·4
3	23 8	533	466	3 7	67	14 6	59·3	42·3	23 32	17·0	16 23	1084	1025	3 40	59	3,3,1,2,2,3,3,3	20	1	83·4
4	23 50	548	470	10 43	78	12 50	57·5	46·0	0 8	11·5	17 46	1060	1040	12 10	20	2,1,2,1,1,1,1,3	12	0	83·4
5	22 55	541	478	10 28	63	13 39	58·0	44·3	22 22	13·7	21 40 / 22 17	1064	1039	12 40	25	2,1,2,1,1,2,1,3	13	0	83·4
6	17 47	533	485	12 50	48	13 43	57·8	43·1	4 32	14·7	22 18	1066	1033	6 30	33	3,2,2,2,1,2,1,3	16	0	83·4
7 d	23 39	575	465	12 7	110	14 15	60·2	25·3	23 35	34·9	21 7	1090	972	23 54	118	0,0,2,3,3,3,4,5	20	1	83·4
8	23 41	552	478	11 51	74	13 54	56·7	40·3	0 3	16·4	18 22	1066	976	0 1	90	4,1,2,3,2,3,3,3	21	1	83·4
9	6 35	544	458	15 3	86	13 9	61·3	42·4	0 28 / 0 35	18·9	16 52	1070	1028	5 18	42	3,4,3,3,4,4,2,2	25	1	83·4
10 d	16 14	587	460	11 32	127	15 18	57·6	27·1	22 30	30·5	18 49	1110	1035	24 0	75	2,2,3,3,3,4,4,4	25	1	83·4
11	19 54	553	451	9 17	102	13 40	57·5	39·8	20 31	17·7	18 48	1078	1030	2 10	48	3,3,4,3,3,3,3,3	25	1	83·4
12	23 20	546	447	12 9	99	5 19	59·0	43·3	8 22	15·7	16 58	1068	1016	5 5	52	2,3,3,3,3,3,2,2	21	1	83·4
13	23 12	544	474	11 12	70	1 19	59·6	43·8	8 1	15·8	15 40	1064	1033	1 40 / 11 34	31	3,1,1,1,1,2,1,2	12	0	83·4
14 q	16 48	529	482	11 9	*47*	13 22	56·4	46·0	8 21	10·4	18 50	1055	1030	12 34	25	1,2,1,1,1,2,0,0	8	0	83·4
15	22 10	560	488	11 44	72	13 30	58·4	45·1	9 7	13·3	2 45	1053	1024	13 28	29	0,1,1,2,3,3,2,3	15	0	83·4
16	0 49	552	447	11 58	105	13 28	58·6	41·4	1 9	17·2	18 11	1059	1028	1 30	31	3,1,0,3,3,2,1,1	14	0	83·4
17	16 51	552	474	11 46	78	14 19	59·0	44·9	7 42	14·1	18 11	1064	1036	10 32	28	1,2,2,3,3,3,2,2	18	0	83·4
18	22 10	587	460	13 6	127	13 51	56·9	*21·6*	22 6	35·3	16 33	1077	1017	22 30	60	3,2,1,3,4,2,3,5	23	1	83·4
19 d	19 2	565	415	8 25	150	6 33	70·0	39·9	18 53	30·1	18 22	1103	968	6 5	135	3,5,5,3,3,4,4,3	30	1	83·4
20	21 4	562	458	11 38	104	13 55	59·1	40·9	23 26	18·2	20 12	1066	1024	23 28	42	3,2,2,3,3,3,3,3	22	1	83·5
21	20 26	572	473	13 14	99	12 33	57·8	43·7	0 1	14·1	19 40	1067	1028	1 20	39	3,2,2,2,3,2,3,1	18	0	83·5
22 q	22 6	547	484	11 24	63	13 0	55·9	43·9	8 29	12·0	18 40	1060	1033	12 10	27	0,2,2,1,2,2,2,2	13	0	83·5
23 q	18 41	543	469	11 49	74	13 39	55·7	45·0	8 33	10·7	21 0	1053	1040	13 1	*13*	0,0,0,2,2,2,2,2	10	0	83·5
24 d	17 11	*637*	372	9 14	*265*	14 9	*70·9*	32·4	20 38	*38·5*	17 36	*1209*	1012	22 25	*197*	1,1,4,5,5,5,5,4	30	2	83·5
25 d	15 55	582	*346*	1 19	236	15 28	59·4	34·2	0 49	25·2	18 23	1093	*951*	1 20	142	5,4,4,4,3,4,4,3	31	1	83·5
26	17 40	528	424	9 39	104	14 4	54·8	43·0	22 40	11·8	18 10	1070	1010	2 27	60	3,3,2,4,3,3,2,3	23	1	83·5
27 q	19 0	534	481	10 13	53	13 51	54·5	44·3	9 6	*10·2*	18 54	1071	1039	0 23	32	2,1,1,1,1,2,2,1	11	0	83·5
28	15 49	563	457	12 0	106	13 59	58·2	37·3	22 27	20·9	18 7	1085	1016	4 55	69	2,3,1,2,3,4,4,3	22	1	83·5
29	3 18	524	411	1 19	113	13 52	53·8	26·2	0 56	27·6	22 41	1061	962	2 39	99	4,4,3,2,1,0,0,2	16	1	83·6
30 q	16 45	520	473	10 40	*47*	13 37	54·5	44·1	3 45	10·4	18 49	1060	1046	12 27	14	1,1,1,1,0,1,1,0	6	0	83·6
Mean	- -	553	456	- -	97	- -	58·6	39·8	- -	18·8	- -	1076	1018	- -	57	-	-	0·53	83·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

118 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	507	507	507	508	507	507	505	503	501	491	484	483	495	502	520	513	537	532	525	518	510	499	498	506	507
2 q	508	506	505	507	515	507	506	509	509	501	489	485	486	503	504	514	530	527	532	534	524	511	513	522	510
3 q	525	517	517	513	514	526	520	520	512	500	493	483	488	497	516	530	539	540	541	530	528	528	525	524	518
4	522	520	514	527	528	533	505	548	530	516	492	497	497	492	499	511	528	520	524	528	528	525	528	522	518
5 q	526	516	512	516	520	520	518	518	512	503	500	496	501	512	508	520	520	535	539	535	531	528	528	528	518
6	527	527	528	524	526	523	520	514	507	500	502	492	486	500	512	510	523	539	535	535	540	531	530	528	519
7	528	532	528	521	512	520	516	513	507	502	500	497	499	505	516	520	525	532	532	531	531	539	528	528	519
8	528	528	524	523	520	521	520	517	511	505	500	489	508	505	528	537	540	544	547	551	527	512	517	522	522
9	525	522	516	515	521	516	520	520	512	507	502	494	506	509	519	517	530	536	543	548	535	539	540	548	523
10	546	531	535	533	527	524	520	519	513	503	488	493	504	500	509	523	528	547	546	548	544	542	539	536	525
11	536	531	525	528	525	523	518	511	504	496	485	493	492	507	520	525	528	527	530	532	535	532	532	530	519
12	529	528	523	527	521	521	518	511	501	493	500	501	504	516	523	530	533	534	551	552	552	540	535	532	524
13	520	520	524	525	521	531	528	515	504	493	492	493	506	510	517	532	536	559	537	540	534	531	527	530	522
14	528	528	525	530	527	525	520	507	497	485	484	483	493	518	526	541	537	539	541	544	540	537	537	546	522
15	539	517	523	524	532	532	527	522	516	505	494	494	498	505	514	528	536	546	557	544	546	542	540	532	526
16	531	548	529	532	534	536	528	507	526	518	501	474	481	510	532	517	516	548	545	544	541	544	542	536	526
17 d	534	530	532	531	523	500	500	460	455	453	457	465	471	479	483	521	534	534	534	530	520	539	535	522	*506*
18	518	516	513	510	505	516	518	512	503	496	493	491	493	502	510	519	523	532	548	534	534	525	542	519	515
19 q	519	517	506	509	518	516	515	513	508	496	491	493	499	501	504	509	518	532	545	536	533	527	524	525	515
20 q	521	521	522	522	519	521	516	509	504	505	507	508	511	512	519	525	538	544	539	541	539	538	542	543	524
21 d	539	529	526	523	524	520	506	512	518	512	510	520	515	528	528	518	548	566	557	571	559	527	511	508	528
22 d	500	484	499	504	521	515	497	490	488	485	492	491	503	525	497	533	512	526	545	544	567	519	520	524	512
23 d	528	531	517	518	500	507	501	504	492	484	493	502	511	504	544	537	541	554	578	554	539	531	510	527	521
24 d	509	523	496	498	515	509	492	450	466	479	489	475	488	486	515	527	532	562	571	548	538	524	509	520	509
25	503	497	514	505	501	505	503	500	482	473	486	482	500	509	514	536	550	558	555	535	529	539	520	505	513
26	507	514	517	513	514	511	504	490	500	501	493	481	498	504	504	509	535	538	548	541	530	531	551	524	515
27	515	515	516	516	512	512	509	502	499	500	492	492	500	504	520	519	546	539	545	547	536	529	521	527	517
28	527	516	521	520	524	520	505	501	493	505	503	501	500	502	523	536	537	539	544	552	544	539	553	531	522
29	525	508	525	520	497	521	523	505	489	497	502	505	501	505	510	535	536	532	544	550	541	539	534	523	519
30	532	528	532	528	528	528	527	524	521	516	509	507	505	513	513	523	543	541	543	551	544	543	543	538	*528*
31	541	523	521	515	523	523	520	529	523	516	512	512	513	516	511	514	516	558	555	551	535	532	532	528	526
Mean	524	520	519	519	519	519	514	508	503	498	495	*493*	499	506	515	523	532	541	*544*	542	537	531	529	527	519

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

119 ESKDALEMUIR (D) — 12° + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	48·8	48·8	48·8	48·8	48·5	47·9	47·2	45·7	45·5	46·3	48·4	51·0	54·0	56·1	56·5	55·9	56·0	54·8	51·7	49·3	47·1	42·2	44·7	45·9	49·6
2 q	46·7	45·9	44·2	42·1	40·0	39·9	40·5	42·1	42·4	43·7	46·7	50·0	53·1	55·8	56·2	54·6	53·0	51·1	49·9	49·7	48·1	46·1	47·1	42·7	*47·1*
3 q	44·3	45·5	43·9	42·0	43·7	42·2	41·2	42·4	43·4	45·3	47·8	50·7	53·2	54·2	53·8	53·4	53·4	52·7	51·7	50·7	48·6	46·8	49·1	49·1	47·9
4	48·8	48·4	47·7	51·2	46·1	43·5	44·1	43·4	44·8	47·0	51·1	53·0	56·2	55·9	55·0	53·1	52·1	50·2	49·5	49·8	49·7	50·3	50·4	49·4	49·6
5 q	49·6	50·3	48·5	47·6	46·8	46·7	46·0	46·2	46·7	47·7	48·9	51·2	53·0	53·8	52·9	52·2	50·8	51·4	50·3	50·4	50·4	50·5	50·4	50·3	49·7
6	49·9	49·9	48·5	47·3	45·9	44·5	44·9	45·8	46·7	47·9	50·2	52·2	54·1	52·9	53·0	52·3	51·7	51·7	50·5	48·6	49·4	50·4	50·7	50·5	49·6
7	49·8	50·4	48·7	47·8	48·7	46·0	45·8	45·3	44·2	45·7	48·0	50·2	52·1	52·4	52·9	52·9	52·2	51·4	51·1	50·3	50·3	49·7	49·6	49·7	49·4
8	49·5	49·4	48·5	47·9	47·1	46·9	46·1	45·8	45·9	47·6	51·8	55·6	56·8	58·0	54·8	52·8	53·1	53·2	52·7	51·2	52·5	47·1	48·1	49·4	50·5
9	49·6	48·1	47·1	48·6	48·5	46·7	52·1	48·8	46·8	47·9	51·0	54·8	56·5	55·8	53·5	51·8	51·3	50·7	51·2	50·5	48·1	49·8	50·2	49·3	50·4
10	51·4	48·7	43·0	42·7	44·5	44·1	43·9	44·8	44·9	46·1	49·6	52·5	53·9	54·5	55·2	54·9	53·8	52·1	50·7	50·3	49·9	49·7	49·8	49·8	49·2
11	47·9	49·7	48·5	46·9	46·0	45·0	44·3	43·1	43·0	45·2	48·8	52·0	54·1	54·8	55·7	54·2	51·7	49·6	49·4	49·4	49·4	49·4	49·6	49·8	49·1
12	50·5	52·1	50·5	48·7	47·1	46·0	44·4	43·2	43·3	45·2	48·3	52·5	55·0	56·2	55·6	54·8	54·1	53·0	52·3	52·0	50·4	47·5	46·0	46·8	49·8
13	45·0	50·7	47·8	46·9	47·9	48·5	47·7	45·9	45·3	46·9	48·9	51·7	55·6	57·0	57·6	55·6	53·9	53·2	50·5	50·3	50·6	50·3	49·5	49·4	50·3
14	49·3	48·8	47·8	47·8	46·0	45·5	45·0	44·0	44·1	45·3	48·7	52·7	55·4	56·6	55·7	53·5	52·0	50·9	50·2	50·2	50·4	50·4	50·2	47·3	49·5
15	44·8	42·9	44·3	46·6	46·2	45·1	43·4	43·1	43·3	45·3	48·5	50·7	53·1	55·1	55·0	54·2	53·4	52·3	51·5	50·7	50·9	50·4	50·4	49·1	48·8
16	44·4	43·9	45·3	47·0	49·9	47·3	46·1	49·8	47·1	49·1	49·9	52·8	55·1	56·5	54·9	56·5	55·8	53·9	52·8	52·3	51·7	50·9	50·1	48·9	50·5
17 d	48·8	48·6	48·2	48·8	58·9	60·6	58·2	53·3	50·7	47·2	49·1	51·1	54·3	56·4	55·2	53·2	53·5	52·8	51·3	49·7	48·6	48·8	47·6	47·3	*51·8*
18	47·2	49·1	49·4	50·4	50·3	47·0	46·1	44·2	45·2	46·7	48·0	50·6	52·8	55·1	55·3	53·9	52·9	51·6	51·1	47·7	44·5	48·1	46·2	48·4	49·2
19 q	48·4	49·0	51·7	50·6	47·4	46·1	46·4	45·4	45·0	45·6	47·9	50·5	52·2	53·8	54·7	54·2	53·5	51·9	51·2	50·2	49·9	49·8	49·8	49·7	49·8
20 q	49·4	49·6	49·4	48·1	46·1	44·7	44·4	43·4	43·0	44·3	46·6	50·0	53·3	53·9	53·7	52·5	51·7	50·9	50·6	51·0	50·7	49·2	47·3	46·3	48·8
21 d	47·3	45·1	46·0	48·3	46·9	44·4	43·7	45·8	46·3	49·3	51·9	54·4	55·5	56·0	56·5	56·3	58·1	59·2	58·0	55·8	52·9	50·9	35·9	36·9	50·1
22 d	44·3	44·5	40·6	40·3	40·9	43·2	43·2	43·9	45·1	47·9	47·9	51·2	52·9	56·3	55·0	56·8	53·5	52·2	51·7	49·6	38·7	41·2	47·5	48·3	47·4
23 d	49·0	51·0	49·2	46·9	44·4	44·2	42·9	44·3	43·5	48·8	51·2	53·4	57·8	55·6	57·3	55·3	53·1	52·5	48·8	47·7	46·7	48·1	42·6	44·0	49·1
24 d	44·1	39·5	38·1	40·8	48·2	52·1	55·6	53·2	49·3	46·3	49·3	52·5	54·4	53·9	54·8	55·9	53·8	53·6	51·2	48·6	46·8	40·8	41·8	46·1	48·8
25	39·2	48·8	47·4	44·6	44·8	45·0	44·1	43·7	44·4	47·4	49·1	52·1	55·1	57·1	57·7	57·3	56·6	53·8	52·0	51·0	50·2	45·7	45·8	47·9	49·2
26	49·2	51·4	48·1	46·1	46·7	46·0	46·2	46·9	46·2	46·3	49·1	51·7	54·4	55·1	54·5	52·9	53·0	51·8	49·8	48·3	48·7	49·5	46·8	45·6	49·3
27	45·9	47·2	47·4	46·1	46·4	45·6	44·4	45·2	46·1	45·9	47·5	50·2	53·9	55·2	55·1	53·4	53·2	52·3	51·3	47·7	48·5	47·7	47·7	48·9	48·9
28	45·3	45·4	46·2	43·4	42·5	43·5	45·2	49·7	49·5	48·6	49·2	53·2	55·2	55·7	56·6	56·7	54·5	53·5	52·3	51·6	49·6	49·4	50·8	44·2	49·7
29	43·0	45·2	45·8	45·9	46·9	48·8	45·8	45·1	45·7	46·0	48·7	50·7	53·7	54·9	54·4	54·8	54·1	52·1	49·8	50·4	49·8	49·0	46·9	47·9	49·0
30	47·7	43·3	44·2	44·9	46·0	46·0	46·1	45·9	45·9	47·6	49·5	51·7	54·3	55·9	56·0	54·8	55·0	53·9	52·3	51·4	49·7	50·6	50·5	50·3	49·7
31	50·4	48·0	38·8	38·9	41·4	41·7	44·0	44·1	44·2	44·8	46·2	48·9	51·5	54·1	54·0	53·5	54·0	53·9	52·3	45·7	49·4	50·3	49·7	48·7	47·9
Mean	47·4	47·7	46·6	46·3	46·5	46·0	45·8	45·6	*45·4*	46·6	49·0	51·8	54·3	*55·3*	55·1	54·3	53·5	52·5	51·3	50·1	49·1	48·4	47·8	47·7	49·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

120 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MAY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1054	1054	1055	1055	1055	1054	1052	1048	1046	1042	1042	1038	1036	1042	1049	1057	1063	1076	1090	1090	1085	1079	1065	1059	*1058*
2 q	1057	1055	1053	1048	1040	1040	1040	1037	1034	1035	1034	1036	1041	1046	1054	1057	1062	1068	1069	1066	1067	1068	1063	1056	1051
3 q	1053	1052	1051	1052	1052	1047	1046	1043	1042	1038	1036	1036	1036	1040	1046	1053	1056	1064	1071	1071	1065	1059	1054	1052	1051
4	1052	1051	1052	1042	1039	1032	1024	1005	1010	1010	1018	1027	1029	1036	1043	1048	1055	1069	1073	1067	1061	1055	1043	1047	1041
5 q	1045	1040	1044	1050	1052	1053	1052	1048	1043	1040	1037	1034	1033	1033	1036	1043	1047	1051	1055	1054	1052	1051	1050	1048	1045
6	1049	1048	1046	1048	1048	1048	1048	1047	1043	1040	1036	1040	1046	1048	1052	1053	1054	1060	1069	1070	1057	1054	1052	1052	1050
7	1052	1049	1043	1040	1034	1025	1027	1032	1037	1036	1036	1034	1037	1040	1043	1046	1051	1055	1057	1058	1057	1048	1048	1049	1043
8	1049	1048	1048	1048	1048	1048	1045	1042	1042	1037	1032	1031	1028	1030	1036	1037	1042	1046	1049	1060	1075	1073	1066	1059	1047
9	1054	1054	1054	1046	1031	1022	1019	1020	1024	1031	1034	1028	1025	1034	1044	1049	1053	1052	1051	1053	1058	1053	1051	1043	1041
10	1010	1000	1010	1019	1031	1039	1040	1039	1037	1034	1030	1030	1036	1043	1049	1052	1057	1059	1059	1054	1052	1048	1049	1049	1039
11	1043	1030	1037	1042	1047	1048	1051	1050	1047	1043	1040	1043	1048	1046	1047	1051	1054	1054	1051	1048	1048	1049	1048	1048	1046
12	1048	1042	1043	1045	1048	1048	1048	1049	1046	1040	1033	1029	1033	1036	1041	1042	1044	1048	1050	1049	1049	1052	1047	1042	1044
13	1034	1024	1029	1039	1045	1043	1042	1042	1042	1038	1032	1024	1021	1028	1036	1048	1056	1061	1065	1062	1057	1051	1048	1046	1042
14	1046	1047	1048	1048	1050	1048	1048	1045	1042	1037	1032	1030	1032	1034	1042	1046	1048	1051	1052	1048	1047	1045	1043	1038	1044
15	1021	1025	1033	1040	1043	1044	1045	1043	1042	1036	1034	1030	1028	1030	1032	1039	1044	1046	1048	1051	1047	1046	1045	1042	1039
16	1036	1024	1032	1036	1037	1037	1042	1040	1032	1030	1030	1034	1033	1039	1065	1065	1060	1054	1050	1047	1046	1044	1043	1043	1042
17 d	1043	1045	1045	1045	1029	987	983	1000	1009	1020	1022	1037	1039	1061	1077	1071	1057	1052	1052	1060	1063	1054	1036	1036	1038
18	1039	1037	1040	1037	1028	1038	1040	1043	1042	1038	1030	1024	1027	1036	1042	1052	1054	1054	1055	1063	1066	1058	1038	1036	1042
19 q	1040	1041	1039	1034	1040	1043	1046	1047	1047	1043	1038	1032	1034	1041	1044	1048	1049	1055	1057	1055	1056	1052	1051	1049	1045
20 q	1048	1048	1046	1046	1049	1050	1052	1052	1051	1042	1034	1027	1025	1033	1042	1046	1047	1048	1051	1051	1049	1048	1046	1043	1045
21 d	1038	1034	1039	1042	1042	1043	1045	1038	1037	1033	1030	1027	1025	1034	1040	1042	1046	1055	1067	1067	1064	1061	1039	1019	1042
22 d	1013	968	970	928	958	983	1009	1024	1027	1029	1030	1037	1043	1048	1054	1049	1054	1051	1052	1060	1067	1049	1045	1043	*1025*
23 d	1039	1019	1015	1015	1019	1025	1034	1031	1033	1032	1030	1027	1031	1046	1049	1061	1067	1073	1070	1059	1058	1034	1021	1024	1038
24 d	1004	999	995	1005	998	975	980	998	1002	1021	1027	1031	1045	1060	1063	1061	1066	1073	1073	1067	1062	1045	1040	1035	1030
25	1025	1012	1015	1029	1034	1039	1043	1045	1044	1042	1040	1037	1042	1049	1058	1069	1076	1082	1083	1078	1069	1055	1030	1037	1047
26	1039	1030	1031	1028	1045	1048	1049	1048	1047	1045	1036	1036	1036	1039	1048	1057	1054	1063	1069	1070	1065	1058	1038	1035	1046
27	1039	1042	1047	1047	1049	1048	1049	1053	1052	1045	1040	1034	1034	1036	1042	1046	1048	1057	1060	1059	1058	1054	1053	1049	1048
28	1042	1043	1042	1042	1043	1042	1041	1037	1037	1036	1034	1027	1023	1031	1037	1043	1056	1064	1065	1060	1059	1057	1030	1028	1042
29	1029	1030	1037	1040	1034	1025	1028	1030	1030	1028	1028	1026	1028	1036	1046	1048	1057	1063	1064	1060	1058	1054	1045	1042	1040
30	1031	1024	1032	1043	1046	1046	1047	1050	1049	1042	1034	1032	1030	1026	1028	1037	1044	1052	1054	1055	1056	1052	1048	1046	1042
31	1039	1028	1006	1013	1030	1036	1038	1036	1040	1040	1037	1036	1034	1036	1041	1051	1049	1054	1068	1077	1065	1055	1052	1048	1042
Mean	1039	1034	1035	1035	1037	1036	1037	1037	1037	1036	1033	*1032*	1033	1039	1046	1051	1054	1058	*1061*	1061	1059	1054	1046	1043	1043

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

121 ESKDALEMUIR — MAY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				°A.
1	17 5	559	11 22	473	86	17 7	57·5	21 20	39·6	17·9	18 51	*1094*	12 22	1034	60	0;0,2,2,3,3,3,2	15	1	83·6
2 q	16 59	543	12 33	476	67	14 8	57·8	4 59	37·8	20·0	17 41	1071	10 28	1034	37	1,2,2,2,2,2,2,2	15	0	83·6
3 q	18 25	545	11 35	481	64	13 24	54·7	5 49	39·3	15·4	19 0	1073	11 53	1035	38	2,2,2,2,2,2,3,2	17	0	83·7
4	7 29	558	11 7	473	85	12 22	57·6	6 11	40·1	17·5	18 19	1075	7 11	1002	73	1,3,4,3,3,3,2,2	21	1	83·7
5 q	17 58	547	14 31	489	58	13 30	54·1	7 19	45·3	*8·8*	18 49	1057	12 53	1031	26	2,1,2,1,3,2,2,1	14	0	83·7
6	20 0	577	12 3	473	104	12 31	55·0	19 55	42·5	12·5	18 54	1072	10 57	1034	38	1,1,1,3,2,2,3,1	14	0	83·7
7	21 8	557	11 32	496	61	14 18	53·1	8 46	44·1	9·0	20 10	1059	5 26	1024	35	1,2,1,1,1,1,2,2	11	0	83·7
8	19 6	570	11 7	486	84	13 39	59·4	8 2	45·5	13·9	20 47	1081	12 23	1024	57	0,1,1,2,2,3,3,2	14	1	83·7
9	19 20	559	11 39	485	74	12 51	56·7	5 38	44·8	11·9	20 28	1059	6 49	1016	43	2,2,3,2,2,1,2,3	17	0	83·7
10	0 1	559	10 39	477	82	0 5	56·3	2 42	41·7	14·6	18 0	1061	1 19	997	64	3,2,2,2,3,3,2,2	19	1	83·8
11	0 1	551	10 40	481	70	14 22	55·8	8 22	42·1	13·7	17 20	1055	1 30	1024	31	3,1,1,1,2,2,1,1	12	0	83·7
12	20 40	566	9 29	492	74	13 40	56·9	8 14	42·6	14·3	21 36	1054	11 29	1028	26	1,2,2,1,2,2,2,2	14	0	83·8
13	17 21	574	11 53	481	93	14 19	58·4	8 26	43·3	15·1	18 16	1066	1 43	1017	49	3,2,2,2,3,3,1,1	17	1	84·0
14	16 59	566	10 19	478	88	13 46	57·2	8 1	42·6	14·6	18 20	1053	11 13	1028	*25*	1,1,1,1,3,3,1,3	14	0	84·1
15	18 30	566	11 57	486	80	13 40	55·7	1 11	40·6	15·1	19 1	1053	1 52	1016	37	3,2,1,2,1,2,2,2	15	0	84·2
16	1 2	579	12 15	462	117	13 29	58·5	0 51	40·4	18·1	14 59	1072	1 17	1023	49	4,2,3,4,4,4,2,2	25	1	84·1
17 d	22 7	578	9 42	443	135	4 46	*63·9*	9 11	45·8	18·1	14 55	1078	6 14	976	102	1,4,4,3,3,2,3,4	24	1	84·2
18	17 54	557	12 9	482	75	13 29	55·8	20 9	42·2	13·6	20 24	1069	11 44	1022	47	2,3,2,1,2,3,3,3	19	0	84·3
19 q	18 29	552	10 14	488	64	14 10	55·0	8 51	44·7	10·3	18 4	1058	11 47	1030	28	2,2,2,0,2,1,2,1	12	0	84·4
20 q	17 38	552	18 16	500	52	13 34	54·5	8 19	42·4	12·1	6 55	1053	12 11	1022	31	1,1,1,2,2,2,1,2	12	0	84·4
21 d	17 32	601	21 52	482	119	17 31	61·3	22 21	33·2	28·1	18 55	1077	23 20	1012	65	2,1,3,2,2,4,5,4	23	1	84·5
22 d	20 41	630	1 10	438	*192*	13 52	59·7	20 36	*25·0*	*34·7*	20 33	1079	3 18	*914*	*165*	4,4,2,3,4,3,5,4	29	1	84·5
23 d	18 38	*635*	11 26	472	163	12 56	60·7	22 39	38·7	22·0	18 32	1077	23 39	989	88	2,2,2,3,4,3,5,4	25	1	84·6
24 d	18 10	602	*437*	7 47	165	6 22	58·1	1 50	36·0	22·1	18 5	1081	5 22	970	111	3,3,3,3,3,3,4,3	25	1	84·6
25	18 52	581	8 58	465	116	14 22	59·1	1 30	36·0	23·1	18 48	1086	1 56	1006	80	4,2,2,3,3,2,3,3	22	1	84·6
26	22 12	571	11 34	467	104	14 1	55·9	23 12	44·4	11·5	19 22	1072	1 59	1024	48	2,2,2,3,3,3,3,3	21	1	84·8
27	18 54	566	10 23	487	79	14 27	55·8	6 52	42·4	13·4	18 40	1060	12 30	1033	27	2,2,1,1,2,3,3,2	16	0	84·8
28	22 11	582	12 3	489	93	15 32	57·3	4 6	42·3	15·0	18 2	1067	22 49	1021	46	2,2,2,2,2,2,2,4	18	1	84·9
29	19 30	516	8 18	481	*35*	13 30	55·8	0 30	41·9	13·9	18 22	1065	5 30	1023	42	3,3,3,2,2,2,2,2	19	1	84·9
30	19 21	583	14 24	494	89	14 9	57·0	1 29	41·4	15·6	20 4	1058	1 15	1022	36	3,2,2,2,3,3,3,1	19	1	84·9
31	17 56	570	14 57	501	69	13 35	54·9	2 29	37·6	17·3	19 23	1081	2 23	1006	75	4,3,2,1,3,3,3,2	21	1	85·0
Mean	- -	569	- -	478	92	- -	57·1	- -	40·8	16·2	- -	1068	- -	1014	54	-	-	0·55	84·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

122 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	527	529	523	512	520	520	519	504	492	504	496	494	496	501	526	529	537	534	546	534	532	531	535	515	519
2 q	522	522	523	527	530	526	520	515	511	504	502	500	501	504	511	511	523	535	543	542	539	536	534	531	521
3 q	534	538	535	537	538	534	528	520	511	507	503	493	504	504	519	519	530	538	542	540	539	539	537	534	526
4 q	534	530	526	524	528	529	524	515	508	503	499	497	504	522	530	534	549	559	554	550	547	543	540	536	529
5 q	530	531	535	528	526	519	516	515	513	508	505	501	509	511	516	526	539	553	546	548	542	539	533	531	526
6	531	528	531	534	536	534	525	516	511	508	506	511	525	523	515	527	533	543	543	549	544	542	539	535	529
7	538	534	532	532	534	527	522	512	511	505	507	512	522	531	535	522	529	527	535	539	540	538	534	533	527
8	531	530	528	530	531	532	526	518	513	488	496	508	503	508	515	535	534	540	538	539	542	538	536	534	525
9	531	534	534	538	542	542	540	528	514	515	507	506	504	531	511	527	541	547	561	559	563	563	554	552	*535*
10 d	546	532	535	534	532	534	511	504	527	512	492	503	489	528	551	562	577	558	570	562	550	543	542	538	535
11 d	558	531	531	524	522	515	510	499	491	487	493	501	513	520	528	521	557	552	561	577	530	527	522	527	525
12	529	527	525	534	520	516	513	506	493	486	482	475	487	481	487	532	530	562	570	567	547	540	535	536	520
13 d	529	527	528	533	545	534	506	461	455	436	489	492	503	472	499	519	543	561	559	542	518	496	488	481	509
14 d	472	488	492	496	480	491	495	487	480	473	461	465	477	504	513	514	515	523	535	539	534	535	553	506	*501*
15 d	513	514	524	511	510	485	499	493	460	426	445	464	481	489	519	512	524	508	531	550	553	547	538	535	505
16 q	527	526	516	515	515	515	507	504	504	496	489	484	483	484	491	506	527	539	542	538	530	530	525	525	513
17	524	523	526	527	531	526	522	511	499	499	497	487	496	516	511	538	562	550	550	559	540	516	499	487	521
18	488	496	485	516	530	512	507	508	499	496	487	484	490	505	515	520	534	527	554	548	536	531	527	527	513
19	527	526	527	527	530	527	524	522	514	499	488	484	494	503	519	516	531	536	538	558	556	534	523	525	522
20	519	516	511	523	522	516	465	488	509	509	494	488	491	504	512	531	528	526	538	546	543	532	530	540	516
21	520	513	504	518	513	504	503	507	503	496	492	497	495	494	506	514	526	534	555	547	540	529	527	527	515
22	542	526	517	520	519	520	512	504	480	492	485	486	500	500	507	515	524	534	528	551	543	538	541	526	517
23	515	519	514	515	518	516	514	507	495	497	503	504	508	506	519	526	527	534	550	547	541	534	527	527	519
24	524	522	526	526	527	522	518	515	507	499	488	499	511	534	531	531	550	547	542	550	535	529	527	530	525
25	515	520	522	523	523	522	515	510	500	492	491	495	498	501	513	520	532	545	564	560	550	538	532	528	521
26	529	526	523	522	522	519	513	502	494	493	495	500	503	510	524	539	547	558	574	579	559	549	545	532	527
27	528	543	538	543	536	522	522	500	491	483	480	480	495	506	506	527	531	543	558	550	553	540	539	532	523
28	534	526	513	521	525	527	526	518	512	491	490	487	489	503	526	527	534	547	559	563	548	541	532	531	524
29	524	523	523	524	532	534	532	524	511	503	496	503	495	512	529	534	539	551	550	549	540	534	527	526	526
30	531	528	525	527	527	530	522	518	517	512	492	496	504	509	516	532	542	550	550	550	549	539	542	550	527
Mean	526	524	522	525	525	522	515	508	501	494	*492*	493	499	507	517	525	537	542	549	*551*	543	536	532	528	521

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

123 ESKDALEMUIR (D) — 12° + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	49·8	46·9	45·3	45·8	49·5	47·0	46·7	45·0	46·7	46·1	47·8	51·3	53·8	53·4	53·5	53·3	53·9	53·0	52·1	51·4	50·6	49·8	48·8	47·5	49·5
2 q	48·5	46·3	46·0	46·3	46·0	45·7	44·8	44·0	44·1	45·1	47·0	49·5	51·5	52·3	53·1	53·3	52·4	51·4	50·7	50·1	49·7	49·5	49·5	49·1	48·6
3 q	48·7	48·5	47·9	47·7	46·2	45·0	44·2	44·0	44·2	46·1	48·4	50·5	52·5	53·3	53·7	53·3	52·1	51·4	50·5	50·4	50·4	50·4	50·5	49·6	49·1
4 q	49·5	48·8	48·0	46·0	45·0	44·3	44·2	44·1	45·0	46·2	48·8	50·6	52·3	52·8	53·0	53·4	52·9	52·1	51·6	51·6	51·2	49·8	49·6	47·7	49·1
5 q	48·4	47·8	47·1	46·7	45·1	43·2	43·2	43·1	44·0	45·2	47·9	50·3	52·3	53·2	54·1	53·8	52·1	51·5	50·3	49·6	50·3	49·9	49·6	48·9	48·7
6	47·8	46·6	45·9	45·1	45·5	43·5	43·3	43·3	42·7	43·4	47·1	51·3	54·1	55·9	55·6	53·9	52·4	49·6	48·7	48·6	48·6	48·6	48·8	48·5	48·3
7	48·5	47·9	47·7	47·8	46·8	45·1	44·1	44·2	44·3	44·9	47·8	52·0	55·8	57·5	57·5	55·9	54·1	52·7	51·2	49·7	49·7	49·1	49·5	49·9	49·7
8	49·4	48·6	48·4	47·7	47·0	45·8	43·9	42·4	42·1	41·7	45·8	49·6	53·0	53·2	53·0	53·3	53·1	52·0	50·4	49·9	49·6	49·6	49·5	49·4	48·7
9	48·7	48·6	47·9	47·1	46·6	45·0	43·2	42·2	40·4	38·8	44·3	50·9	53·2	55·0	56·5	56·6	55·0	52·7	50·4	49·6	49·6	50·2	49·4	47·8	48·7
10 d	49·9	47·6	46·9	44·9	43·2	43·9	48·7	50·7	47·9	47·0	49·7	52·9	55·9	59·3	60·5	67·3	61·0	59·0	55·6	53·9	52·5	50·5	48·6	47·9	*51·9*
11 d	49·5	45·9	45·2	44·5	44·1	42·4	40·3	39·3	39·7	43·2	47·9	52·5	55·3	56·0	55·6	53·9	54·1	53·1	52·5	47·8	48·1	47·5	46·7	48·0	48·0
12	47·5	48·6	49·7	49·4	46·1	46·3	43·6	43·5	43·4	45·2	48·1	51·1	53·9	53·6	53·6	54·3	53·9	52·8	52·6	50·9	49·3	48·8	48·3	48·2	49·3
13 d	48·3	48·1	47·6	47·5	44·0	41·5	40·6	43·9	53·6	52·5	54·2	52·7	54·7	57·6	54·9	54·2	54·3	51·6	51·5	49·1	44·9	43·2	43·1	41·8	49·0
14 d	36·7	34·7	28·8	36·1	43·4	46·1	44·9	41·7	42·7	44·1	46·6	49·3	51·5	52·3	52·8	52·4	51·5	51·4	51·6	51·3	50·1	49·8	47·5	42·6	*45·8*
15 d	42·2	41·9	39·8	39·9	43·3	44·8	47·7	48·0	48·0	54·5	53·7	54·1	56·6	57·0	56·3	57·6	56·3	54·0	53·0	53·0	51·7	50·5	48·9	48·4	50·1
16 q	47·3	48·3	45·2	45·2	44·5	44·0	44·1	44·3	45·1	45·3	45·9	46·7	48·6	50·6	51·5	52·3	52·4	52·3	51·6	50·3	49·7	48·5	48·9	48·0	47·9
17	47·6	47·3	47·1	46·3	44·8	44·3	44·0	43·0	43·1	44·2	45·7	48·3	50·9	52·3	53·6	55·0	55·8	54·9	54·0	50·0	46·6	41·1	39·6	37·3	47·4
18	37·1	34·5	37·1	41·3	40·1	41·1	42·2	42·5	43·4	44·7	46·9	50·0	52·9	55·3	56·9	56·8	55·0	52·3	51·3	48·9	49·1	49·3	48·5	47·7	46·9
19	47·6	47·1	47·0	47·5	45·9	44·9	44·1	44·0	43·3	44·7	47·2	50·6	54·6	55·2	56·9	57·5	54·9	54·1	53·6	51·7	50·6	47·0	44·0	46·1	49·2
20	42·8	42·5	43·3	48·2	41·4	44·7	54·1	56·6	49·3	44·7	46·8	51·0	53·9	56·5	56·2	55·1	54·7	52·7	51·7	51·4	45·9	47·1	48·5	47·8	49·5
21	44·2	47·0	50·7	46·9	44·2	45·4	45·1	47·8	44·8	45·7	48·4	50·3	52·0	52·1	52·9	52·3	51·7	50·3	49·3	46·4	46·6	47·8	48·3	48·6	48·3
22	48·4	43·8	45·6	46·0	45·1	43·8	42·3	42·4	41·9	42·3	45·7	48·5	50·6	54·9	54·6	54·0	53·1	51·4	49·7	50·5	48·7	48·5	46·0	47·9	47·7
23	47·3	47·9	46·3	45·8	44·4	44·3	44·3	44·9	44·9	46·9	49·1	51·5	52·9	53·9	54·0	53·5	52·4	51·1	49·6	49·9	49·6	47·9	48·8	48·8	48·7
24	47·6	46·9	46·8	45·1	44·4	43·3	42·4	44·1	43·5	45·0	47·6	50·3	53·2	56·5	57·0	55·0	55·0	53·8	52·3	52·0	47·0	47·7	48·7	42·4	48·7
25	44·1	44·9	44·2	44·5	44·6	44·1	44·2	44·5	44·2	45·9	47·5	50·7	52·8	53·5	54·1	54·5	53·7	52·2	51·6	50·4	47·7	49·1	47·5	44·7	48·1
26	40·1	43·4	43·8	42·7	41·3	39·1	38·4	40·3	42·3	44·9	48·3	50·6	52·9	55·3	56·5	55·6	54·1	53·1	52·9	53·4	50·9	43·5	44·6	42·6	47·1
27	43·6	43·5	41·0	42·8	43·3	44·3	46·2	45·0	47·0	47·8	51·2	53·9	55·8	57·7	56·5	54·5	53·2	51·6	50·9	50·6	50·9	49·6	49·6	48·6	49·1
28	49·4	51·2	48·7	46·1	44·7	42·7	42·7	42·1	42·3	45·1	47·3	50·2	52·8	54·5	56·3	54·7	52·9	51·7	51·5	51·2	49·1	49·1	49·2	49·9	49·0
29	49·9	46·8	43·5	41·7	41·8	39·3	40·3	42·7	44·6	46·8	49·5	53·0	55·7	56·9	56·6	55·2	54·0	52·9	51·7	50·4	48·9	48·7	48·2	47·8	48·6
30	46·9	46·9	46·1	45·0	43·1	42·9	42·4	42·6	44·0	44·3	47·2	51·3	52·4	53·5	54·0	53·8	52·5	51·7	50·6	49·8	49·6	48·8	48·8	49·4	48·2
Mean	46·6	46·0	45·3	45·3	44·5	*43·9*	44·0	44·2	44·4	45·4	48·0	50·9	53·3	54·7	*55·0*	54·9	53·8	52·5	51·5	50·5	49·2	48·4	47·9	47·1	48·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

124 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JUNE 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1042	1036	1042	1046	1036	1028	1033	1040	1045	1041	1036	1034	1037	1040	1042	1048	1052	1054	1054	1054	1052	1048	1046	1045	1043
2 q	1042	1043	1046	1047	1047	1047	1046	1048	1049	1046	1039	1036	1037	1040	1042	1045	1048	1048	1049	1051	1049	1048	1047	1047	1045
3 q	1046	1045	1045	1046	1048	1048	1046	1046	1045	1040	1031	1028	1028	1034	1040	1042	1045	1048	1052	1053	1051	1047	1047	1046	1044
4 q	1045	1043	1045	1048	1048	1047	1045	1042	1037	1033	1030	1030	1030	1033	1034	1034	1037	1040	1045	1046	1045	1046	1043	1040	1040
5 q	1042	1042	1041	1043	1046	1046	1043	1042	1037	1030	1022	1022	1028	1031	1036	1039	1042	1043	1046	1049	1051	1049	1050	1048	1040
6	1045	1043	1042	1043	1045	1045	1041	1037	1038	1036	1022	1021	1023	1033	1039	1043	1048	1051	1048	1047	1047	1046	1046	1045	1041
7	1044	1045	1045	1045	1043	1045	1044	1045	1042	1039	1029	1022	1024	1027	1037	1048	1057	1062	1058	1055	1051	1048	1046	1046	1044
8	1046	1046	1047	1048	1048	1047	1047	1046	1042	1039	1035	1027	1027	1031	1036	1040	1049	1052	1048	1047	1046	1047	1046	1046	1043
9	1046	1046	1046	1046	1046	1045	1041	1037	1039	1031	1017	1013	1018	1025	1034	1037	1045	1051	1052	1053	1049	1046	1047	1046	1040
10 d	1043	1042	1042	1043	1046	1046	1045	1036	1029	1027	1027	1024	1028	1033	1048	1063	1085	1099	1090	1079	1067	1060	1054	1052	1050
11 d	1048	1051	1051	1053	1053	1054	1052	1048	1040	1035	1027	1024	1025	1030	1037	1044	1045	1051	1055	1062	1061	1058	1052	1049	1046
12	1048	1046	1041	1034	1035	1040	1044	1043	1045	1042	1035	1030	1030	1037	1044	1048	1055	1057	1065	1071	1069	1060	1049	1046	1046
13 d	1045	1047	1049	1051	1050	1051	1047	1047	1031	1034	1033	1036	1051	1050	1054	1061	1057	1077	1097	1092	1087	1067	1034	1010	*1052*
14 d	961	945	925	954	979	994	1016	1037	1046	1047	1043	1039	1039	1042	1045	1045	1048	1052	1054	1052	1053	1052	1041	1041	*1023*
15 d	1040	1034	1011	988	987	994	1001	1010	1021	1028	1034	1039	1044	1053	1059	1063	1064	1065	1064	1058	1055	1052	1053	1049	1036
16 q	1046	1042	1048	1052	1052	1053	1053	1053	1052	1049	1048	1050	1048	1046	1049	1051	1051	1053	1052	1054	1054	1054	1050	1049	1050
17	1048	1046	1046	1045	1046	1048	1048	1046	1045	1040	1040	1038	1033	1036	1041	1043	1049	1055	1059	1067	1065	1052	1039	1014	1045
18	1001	998	999	976	999	1021	1033	1037	1048	1051	1051	1049	1044	1042	1038	1038	1040	1047	1056	1063	1065	1058	1054	1050	1036
19	1048	1048	1048	1047	1049	1049	1051	1051	1049	1048	1045	1039	1036	1040	1048	1051	1051	1062	1064	1061	1060	1063	1060	1049	1051
20	1039	1042	1043	1017	1027	1034	1031	1015	1027	1036	1036	1036	1041	1043	1047	1051	1060	1060	1058	1058	1061	1055	1049	1017	1041
21	1010	1028	1028	1033	1039	1042	1038	1037	1040	1037	1034	1032	1039	1040	1043	1048	1053	1054	1054	1063	1057	1056	1051	1046	1042
22	1033	1034	1040	1044	1046	1046	1042	1039	1029	1039	1038	1036	1028	1034	1038	1045	1048	1052	1058	1058	1061	1058	1041	1037	1043
23	1040	1043	1045	1046	1048	1050	1052	1054	1052	1048	1043	1037	1039	1040	1042	1046	1053	1055	1058	1055	1054	1054	1052	1051	1048
24	1051	1051	1050	1051	1051	1050	1046	1045	1042	1033	1031	1027	1027	1028	1033	1040	1046	1052	1055	1054	1058	1055	1050	1048	1045
25	1043	1043	1045	1045	1046	1046	1047	1044	1041	1037	1034	1035	1035	1037	1039	1038	1043	1047	1046	1051	1055	1054	1051	1045	1044
26	1029	1021	1026	1031	1036	1040	1042	1042	1041	1033	1026	1024	1027	1030	1035	1040	1045	1048	1050	1049	1052	1052	1045	1043	1038
27	1039	1033	1033	1034	1036	1035	1034	1038	1035	1033	1027	1025	1025	1033	1046	1052	1057	1056	1049	1046	1048	1052	1048	1047	1040
28	1046	1039	1040	1046	1051	1051	1048	1043	1042	1046	1043	1045	1045	1041	1044	1052	1054	1052	1052	1052	1057	1054	1051	1048	1048
29	1039	1018	1028	1036	1040	1040	1036	1037	1037	1033	1030	1020	1010	1013	1020	1033	1042	1046	1050	1053	1055	1053	1050	1048	1036
30	1043	1040	1043	1044	1047	1048	1046	1041	1040	1035	1033	1034	1034	1034	1035	1041	1050	1052	1052	1051	1049	1049	1046	1042	1043
Mean	1038	1036	1036	1036	1039	1041	1041	1041	1040	1038	1034	*1032*	1033	1036	1041	1046	1051	1055	1056	*1057*	1056	1053	1048	1043	1043

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

125 ESKDALEMUIR — JUNE 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	18 7	554	487	8 7	67	17 1	54·7	44·2	7 40	10·5	19 2	1055	1024	5 17	31	2,2,2,2,3,2,2,3	18	0	85·1
2 q	18 56	544	499	11 13	45	15 30	53·8	43·3	8 3	10·5	19 20	1052	1035	11 28	17	2,1,1,1,2,2,0,0	9	0	85·1
3 q	18 33	547	484	11 46	63	15 19	54·0	43·0	7 58	11·0	19 13	1054	1024	11 56	30	2,0,1,2,2,2,2,0	11	0	85·2
4 q	17 50	571	494	11 40	77	15 29	53·9	43·3	7 1	10·6	4 11	1048	1029	11 50	19	1,1,1,1,1,2,1,2	10	0	85·2
5 q	17 14	565	492	11 8	73	14 33	54·9	42·4	7 28	12·5	22 22	1052	1019	11 7	33	2,1,2,2,1,2,2,2	14	0	85·3
6	19 51	556	488	10 47	68	14 21	56·7	42·4	8 5) 10 1)	14·3	17 30	1052	1018	11 57	34	1,1,1,3,3,2,2,1	14	0	85·4
7	20 44	543	503	7 57	*40*	13 56	58·3	42·5	6 56	15·8	17 32	1064	1022	11 19	42	1,1,2,2,2,2,2,1	13	0	85·4
8	15 31	558	475	9 17	83	12 59	54·6	37·8	9 13	16·8	17 9	1053	1024	11 40	29	0,1,2,3,2,3,1,0	12	0	85·4
9	21 10	577	484	10 51	93	15 0	57·5	35·1	9 17	22·4	19 3	1054	1011	11 41	43	1,1,2,3,3,2,2,2	16	1	85·5
10 d	15 44	*640*	437	13 17	*203*	15 38	*70·2*	42·2	4 54	28·0	17 39	*1101*	1022	11 38	79	2,2,4,3,5,5,3,4	28	1	85·5
11 d	0 18	617	476	8 41	141	0 21	58·3	36·1	5 57	22·2	19 36	1066	1022	11 52	44	5,3,2,3,2,4,4,2	25	1	85·6
12	18 0	584	459	13 26	125	12 59	55·0	42·2	6 47	12·8	20 1	1072	1028	12 10	44	2,3,1,2,3,4,3,1	19	1	85·6
13 d	17 21	582	422	8 8	160	13 22	60·2	36·9	23 16	23·3	19 10	1100	975	24 0	125	1,3,4,4,5,4,4,4	29	1	85·7
14 d	22 13	597	425	0 20	172	14 18	53·3	*24·3*	2 42	*29·0*	18 22	1055	*915*	2 29	*140*	4,4,3,2,3,2,3,4	25	1	85.8
15 d	19 7	579	*413*	9 19	166	15 33	58·4	36·6	3 42	21·8	17 20	1066	982	5 2	84	3,4,4,4,4,3,3,2	27	1	85·8
16 q	18 44	546	480	13 10	66	15 59	52·9	43·4	6 6	*9·5*	19 51	1055	1041	1 38	*14*	2,1,2,2,2,2,2,1	14	0	85·8
17	18 48	622	472	18 56	150	17 17	56·9	36·2	23 49	20·7	20 10	1073	1006	23 42	67	1,1,2,3,3,4,5,3	22	1	85·9
18	19 8	568	456	2 45	112	15 23	57·7	30·6	1 52	27·1	19 52	1069	967	3 2	102	3,4,3,2,3,4,3,1	23	1	85·9
19	19 55	576	477	11 49	99	14 50	58·4	43·2	8 39	15·2	18 11	1066	1034	12 10	32	0,1,1,2,2,3,3,3	15	0	86·0
20	20 48	574	437	6 29	137	6 50	63·5	39·4	0 53	24·1	19 57	1064	1000	24 0	64	3,3,5,3,3,3,3,4	27	1	86·0
21	18 45	563	476	12 46	87	14 30	53·4	41·4	6 33	12·0	19 40	1065	1000	0 1	65	3,2,3,2,3,3,2,2	20	1	86·1
22	19 13	562	464	11 7	98	13 20	55·8	39·6	6 45	16·2	20 15	1063	1028	8 43	35	3,1,2,2,4,2,3,3	20	1	86·1
23	18 33	554	492	8 35) 9 22)	62	14 35	54·7	43·3	7 3	11·4	18 0	1060	1036	11 41	24	2,1,1,2,2,2,2,2	14	0	86·1
24	16 46	566	479	10 8	87	13 56	57·7	39·8	23 48	17·9	20 32	1060	1024	11 56	36	1,1,1,2,3,3,3,3	17	0	86·1
25	18 42	573	487	10 42	86	14 29	54·9	42·1	24 0	12·8	20 33	1057	1033	10 30	24	2,2,1,1,2,2,2,3	15	0	86·1
26	19 27	596	487	9 11	109	14 0	56·9	36·3	0 38) 0 42)	20·6	20 20	1054	1018	1 43	36	4,1,2,2,2,2,3,3	19	1	86·1
27	18 50	567	470	11 5	97	13 55	59·5	39·6	2 18	19·9	16 42	1057	1023	10 58	34	3,3,3,2,3,2,2,1	19	1	86·4
28	18 46	570	480	11 59	90	14 40	57·2	40·8	7 30	16·4	20 39	1058	1035	1 52	23	2,1,1,2,3,3,2,2	16	0	86·4
29	18 14	560	485	12 30	75	14 11	57·5	38·6	5 45	18·9	20 12	1057	1009	12 48	48	3,2,2,2,3,2,2,1	17	1	86·5
30	23 57	563	485	10 30	78	14 10	54·8	41·3	6 39	13·5	17 18	1053	1030	10 28	23	1,1,2,2,2,2,1,3	14	0	86·5
Mean	- -	572	472	- -	100	- -	56·9	39·6	- -	17·3	- -	1062	1014	- -	47	-	-	0·50	85·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

126 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	550	534	538	526	538	550	532	515	501	506	504	506	514	518	524	537	540	542	547	542	538	544	532	523	529
2	522	519	515	526	527	526	515	494	495	508	511	508	507	511	526	523	530	534	535	534	539	534	530	527	521
3	538	522	522	528	527	531	528	522	514	511	510	506	524	523	550	553	574	538	540	545	546	542	529	526	*531*
4 d	523	523	527	538	539	520	535	519	507	509	511	499	492	507	515	546	558	558	607	562	524	518	514	527	528
5 d	524	507	490	457	501	511	283	226	66	246	246	219	874	698	874	815	343	378	387	421	423	437	413	424	*448*
6 d	417	418	416	417	417	405	400	402	421	414	421	446	499	592	604	589	573	562	520	495	491	456	456	442	470
7 d	446	429	375	348	394	488	480	418	429	429	437	449	465	469	484	499	488	519	529	520	515	495	495	496	462
8	492	487	488	488	486	482	463	446	441	469	457	456	471	492	477	518	511	522	519	531	510	500	499	495	487
9	493	490	488	488	491	492	483	477	475	471	465	473	487	480	494	475	527	536	537	529	523	549	542	533	500
10	533	525	498	510	515	507	497	480	466	472	471	470	478	501	517	534	568	568	562	544	519	512	476	487	509
11	502	513	514	504	503	503	501	476	469	480	474	466	468	472	487	492	500	504	511	515	518	515	511	511	496
12	511	512	519	510	515	518	506	490	492	480	465	465	476	465	496	503	505	510	519	522	522	520	518	517	502
13 q	515	510	510	515	515	508	499	490	481	467	465	472	484	495	497	506	511	512	522	520	519	519	520	519	503
14 q	512	508	508	509	508	503	500	499	495	484	472	472	475	475	495	507	519	517	523	527	526	522	518	515	504
15	512	511	508	508	508	506	497	496	495	489	476	473	475	491	515	515	523	527	537	534	534	533	534	533	510
16	530	528	523	520	539	543	527	518	510	508	491	499	509	506	536	508	542	547	529	540	531	522	515	516	522
17	492	515	512	508	497	504	503	494	477	495	499	493	494	499	517	514	515	543	543	531	529	527	519	515	510
18	526	512	509	508	510	514	511	499	487	477	481	484	480	491	496	507	520	523	538	539	526	524	519	514	508
19	511	511	516	517	511	513	512	508	501	485	483	485	487	500	510	516	519	527	527	531	527	534	528	529	512
20	514	512	506	511	507	515	519	505	483	484	488	484	485	492	511	522	531	518	534	531	534	531	526	531	511
21 d	526	527	542	551	539	523	504	477	414	393	425	460	492	490	496	488	499	522	543	539	534	504	507	512	500
22	511	495	472	488	487	488	500	496	493	480	461	470	479	499	507	511	492	522	531	529	530	530	530	531	501
23	531	503	503	487	502	498	491	500	489	473	460	452	484	503	490	503	518	511	520	521	530	524	531	529	502
24	505	521	522	510	502	499	510	505	500	483	483	483	486	494	498	515	516	526	540	542	528	523	521	525	510
25	525	523	529	528	533	536	494	479	489	487	484	484	484	499	534	525	527	526	531	526	521	520	514	511	513
26 q	511	510	510	510	509	509	507	502	496	491	481	475	471	479	502	513	527	533	530	533	529	528	529	521	509
27 q	518	516	517	514	518	518	516	512	502	491	482	477	481	488	504	522	526	532	532	533	537	534	529	528	514
28	521	520	520	521	522	523	521	518	506	489	470	471	480	498	513	526	534	544	541	542	537	533	531	527	517
29 q	525	524	523	528	530	531	532	528	517	501	501	495	490	489	502	515	522	538	542	542	541	538	535	538	522
30	531	530	529	528	526	523	521	513	503	498	484	483	487	496	507	519	527	529	534	538	537	526	522	526	517
31	529	534	533	532	530	526	522	518	511	502	492	486	494	502	510	513	525	523	533	545	538	537	533	522	520
Mean	513	509	506	504	508	510	497	485	472	473	*469*	470	499	504	522	527	520	525	*530*	529	524	520	515	515	506

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

127 ESKDALEMUIR (D) — 12° + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	45·8	44·3	46·0	46·9	49·6	44·2	41·3	42·4	43·7	45·6	47·0	50·5	53·2	54·8	55·8	54·8	54·1	53·4	52·5	51·0	49·9	49·6	46·9	46·6	48·7
2	46·7	46·9	52·2	48·8	44·8	44·5	44·1	43·9	46·0	44·6	45·8	47·5	48·6	50·5	52·6	52·3	51·5	50·5	50·2	49·4	48·8	48·8	48·5	48·8	48·2
3	49·6	47·6	47·6	47·0	45·1	44·3	44·1	43·9	44·2	45·1	47·1	50·4	53·9	54·8	55·2	55·5	55·0	52·5	52·0	51·3	51·2	49·3	48·6	48·6	49·3
4 d	48·5	47·8	47·5	47·6	46·6	51·1	46·9	46·7	48·6	46·7	47·5	51·4	53·8	54·5	54·8	55·4	54·8	53·4	54·0	51·3	48·7	40·3	49·4	50·4	*49·9*
5 d	47·7	47·0	50·7	30·6	39·4	39·0	60·2	50·2	20·7	39·9	24·5	9·0	−0·9	18·0	23·4	35·4	54·3	56·7	55·0	54·1	54·0	62·1	53·9	49·5	*40·6*
6 d	47·3	50·4	48·0	45·8	45·9	45·2	45·1	45·4	44·9	46·8	47·8	47·8	50·4	49·5	49·9	50·1	48·6	49·6	51·3	50·2	46·6	51·5	43·8	42·3	47·7
7 d	43·3	37·0	54·0	51·5	58·4	45·8	45·8	42·5	44·9	47·9	49·6	49·0	50·5	52·1	52·0	50·3	49·6	49·7	51·3	50·7	49·5	47·6	46·6	48·0	48·7
8	46·7	46·0	45·8	44·9	44·1	44·3	46·9	50·3	50·1	48·7	47·9	50·5	53·3	55·2	53·2	53·8	50·5	48·8	48·7	44·3	47·7	48·9	48·8	47·8	48·6
9	47·7	47·0	46·0	44·2	44·2	42·6	43·1	42·8	43·3	45·8	47·4	49·8	52·2	53·9	52·7	51·6	51·7	51·6	51·1	50·1	49·5	50·0	47·4	44·1	47·9
10	46·7	40·8	39·7	46·8	45·4	43·9	44·1	42·1	43·5	43·6	45·8	48·9	52·3	56·4	58·0	57·9	56·3	54·8	51·6	48·6	45·3	36·9	39·9	39·4	47·0
11	44·9	46·2	46·5	45·3	45·3	44·4	44·4	47·3	49·2	47·8	48·4	48·9	51·6	52·4	53·1	52·5	51·6	51·6	50·3	49·7	49·4	48·6	47·8	48·1	48·6
12	47·7	47·9	49·5	47·7	46·0	45·0	45·7	50·1	49·6	47·5	48·9	51·4	54·0	53·6	53·2	52·3	50·4	49·4	48·8	48·7	48·0	48·0	47·7	46·2	49·1
13 q	46·1	45·8	45·8	45·1	44·2	42·1	41·9	42·4	42·4	45·0	48·4	51·4	53·3	55·6	55·3	54·0	52·3	51·1	50·5	49·4	48·6	48·3	46·5	46·0	48·0
14 q	45·7	45·9	45·9	45·2	44·2	43·0	43·3	44·1	44·0	45·6	47·2	48·7	50·4	52·1	53·2	53·0	52·4	50·6	48·9	48·5	47·9	45·8	47·6	47·7	47·5
15	47·5	46·2	45·8	44·9	43·8	42·3	41·3	42·4	43·2	44·9	47·6	51·0	53·0	53·9	53·2	52·3	52·2	52·1	51·7	51·1	50·3	49·4	48·7	48·0	48·2
16	48·3	46·0	45·9	43·0	41·3	38·6	42·1	43·1	43·7	43·4	46·6	49·4	52·5	54·9	57·9	55·2	55·7	54·7	52·2	51·2	49·0	44·3	43·6	41·2	47·7
17	44·2	47·7	45·5	43·7	44·7	44·4	42·5	41·3	43·0	44·2	46·6	49·5	52·1	53·3	53·9	53·1	52·4	50·5	46·8	48·5	48·7	47·9	47·5	47·3	47·5
18	51·2	46·1	43·0	44·1	43·5	42·2	40·9	40·3	40·4	43·1	44·9	48·0	51·2	52·2	52·2	51·6	50·6	48·7	48·5	48·2	47·7	47·7	46·8	47·1	46·7
19	46·9	46·9	50·3	45·0	40·7	40·0	41·4	42·2	42·2	44·0	46·9	51·1	53·4	53·5	53·0	53·0	51·4	49·6	50·2	49·3	48·3	48·7	47·8	44·1	47·5
20	45·9	46·1	44·8	44·1	42·4	42·7	43·1	39·6	39·9	44·1	44·9	48·7	51·9	54·1	54·1	51·6	51·4	49·0	48·6	48·1	45·2	44·2	47·7	48·6	46·7
21 d	47·9	46·6	46·9	42·8	40·6	49·6	54·0	49·5	44·3	52·3	52·9	53·9	53·7	54·8	53·8	52·4	51·1	50·7	50·3	44·4	37·7	46·4	48·5	49·4	48·9
22	46·9	47·9	47·9	46·9	41·4	43·7	44·5	43·3	42·7	42·3	44·1	48·5	52·9	54·8	55·9	54·7	51·3	49·5	50·5	50·3	49·8	49·5	49·4	46·9	48·1
23	46·6	50·3	45·0	45·0	45·0	44·4	47·5	46·5	47·6	46·3	47·9	51·2	54·5	55·8	54·6	53·4	51·8	49·1	48·8	48·9	49·6	48·8	49·0	45·8	48·9
24	41·0	41·7	42·7	41·3	40·7	41·0	41·3	40·6	40·5	42·7	46·7	49·4	52·5	55·0	53·5	51·6	52·2	51·0	50·8	49·5	47·6	46·5	45·7	47·5	46·4
25	47·5	48·3	47·7	45·1	42·9	40·2	39·9	44·5	45·6	46·3	46·2	48·3	51·5	52·3	53·4	53·0	51·8	49·5	48·8	47·5	47·8	47·3	46·6	47·3	47·5
26 q	47·1	47·2	47·5	46·7	45·8	43·9	42·5	42·2	43·0	44·2	46·9	50·0	53·2	54·8	55·6	54·6	53·9	52·7	51·0	49·5	48·1	47·3	47·0	46·1	48·4
27 q	46·6	45·9	45·6	45·0	44·2	42·6	41·2	41·1	41·6	42·6	44·4	47·6	52·0	54·4	56·0	55·0	52·7	50·3	48·5	48·5	48·1	48·0	46·1	46·8	47·3
28	45·5	45·0	45·2	44·8	44·0	43·5	44·3	44·1	44·1	45·8	48·1	51·6	56·7	57·4	56·0	54·0	52·1	50·6	49·8	49·5	49·0	48·4	47·9	47·6	48·5
29 q	46·8	47·3	46·1	46·3	45·3	43·6	42·7	42·3	42·2	43·7	46·6	50·2	52·3	54·2	54·0	53·4	51·6	49·7	48·7	48·5	48·5	48·6	48·0	49·1	47·9
30	45·9	45·7	45·3	44·2	42·7	41·2	40·9	41·5	42·6	44·2	46·1	49·9	53·1	55·0	55·6	54·2	52·9	51·5	50·2	50·2	49·4	48·4	48·1	47·1	47·7
31	46·9	47·1	47·0	46·1	44·7	42·8	43·3	43·7	43·2	44·6	47·7	50·5	54·5	56·1	55·1	52·5	50·6	49·3	49·2	49·4	48·9	45·7	43·2	45·8	47·8
Mean	46·7	46·2	46·7	45·1	44·4	43·4	44·2	43·9	*43·4*	45·1	46·4	48·5	50·9	52·9	*53·2*	52·7	52·2	51·0	50·3	49·3	48·3	47·8	47·3	46·7	47·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

128 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JULY 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1029	1022	1019	1028	1019	1010	1015	1022	1029	1025	1024	1025	1026	1034	1034	1034	1043	1046	1048	1051	1052	1049	1050	1048	1033
2	1045	1042	1036	1033	1042	1046	1046	1046	1044	1038	1033	1033	1033	1035	1036	1036	1040	1046	1049	1049	1049	1050	1049	1048	1042
3	1042	1038	1043	1045	1045	1045	1046	1045	1039	1035	1029	1025	1019	1022	1030	1034	1049	1063	1057	1052	1047	1049	1051	1046	1041
4 d	1046	1046	1046	1044	1040	1019	1013	1022	1028	1030	1030	1031	1037	1040	1042	1049	1064	1085	1099	1120	1115	1081	1063	1054	1052
5 d	1015	1005	892	891	987	1029	959	857	929	969	1185	1359	1174	1251	1275	1275	1157	1097	1105	1099	1084	1041	1046	1082	1073
6 d	1082	1076	1077	1084	1088	1091	1093	1091	1093	1103	1110	1126	1135	1141	1154	1132	1120	1115	1097	1076	1076	1061	1057	1050	*1097*
7 d	1000	935	867	893	877	944	995	1030	1046	1053	1060	1060	1067	1075	1081	1088	1090	1087	1079	1075	1076	1082	1077	1073	*1030*
8	1070	1072	1072	1072	1067	1061	1059	1060	1070	1075	1073		1066	1076	1088	1084	1099	1094	1087	1085	1076	1070	1068	1068	1074
9	1068	1069	1070	1072	1070	1070	1067	1063	1061	1058	1051	1046	1046	1049	1058	1058	1060	1066	1071	1069	1067	1057	1055	1049	1061
10	1024	1036	1044	1049	1052	1057	1059	1066	1066	1067	1066	1054	1051	1055	1066	1077	1092	1102	1102	1098	1078	1043	1028	1046	1062
11	1057	1057	1057	1059	1064	1069	1069	1069	1058	1052	1051	1048	1049	1055	1058	1063	1073	1077	1075	1075	1074	1073	1069	1067	1063
12	1067	1064	1059	1061	1063	1062	1061	1061	1056	1057	1054	1049	1051	1067	1063	1065	1068	1068	1064	1061	1061	1057	1057	1057	1061
13 q	1058	1060	1060	1061	1062	1062	1059	1057	1054	1055	1055	1049	1046	1050	1055	1058	1061	1062	1062	1064	1063	1062	1058	1055	1058
14 q	1055	1056	1057	1060	1062	1063	1061	1061	1061	1056	1055	1057	1056	1055	1057	1057	1058	1061	1061	1060	1061	1063	1058	1057	1059
15	1057	1057	1058	1061	1061	1061	1060	1059	1056	1051	1046	1042	1039	1039	1043	1047	1049	1052	1055	1057	1057	1057	1056	1051	1053
16	1049	1046	1047	1045	1046	1045	1045	1049	1051	1046	1045	1045	1040	1043	1043	1050	1055	1062	1075	1073	1069	1064	1057	1048	1052
17	1039	1037	1045	1051	1052	1052	1049	1045	1045	1044	1044	1044	1049	1051	1049	1051	1055	1057	1067	1069	1067	1061	1058	1055	1051
18	1040	1032	1038	1046	1051	1055	1056	1055	1057	1057	1051	1045	1044	1043	1045	1051	1054	1060	1061	1063	1063	1061	1057	1055	1052
19	1055	1055	1046	1034	1045	1048	1045	1046	1049	1049	1044	1043	1044	1048	1054	1058	1061	1061	1061	1061	1061	1058	1055	1045	1051
20	1045	1046	1050	1051	1055	1055	1052	1052	1049	1048	1045	1045	1040	1033	1034	1043	1052	1055	1058	1058	1064	1063	1057	1054	1050
21 d	1051	1040	1024	1015	1028	1029	1002	1002	1018	1028	1034	1040	1045	1055	1069	1075	1073	1075	1079	1103	1099	1081	1069	1061	1050
22	1055	1039	1025	1027	1034	1049	1048	1055	1056	1056	1057	1054	1050	1054	1067	1076	1082	1079	1069	1065	1061	1061	1059	1052	1055
23	1044	1030	1030	1037	1038	1049	1047	1049	1052	1057	1057	1056	1054	1063	1076	1075	1075	1076	1073	1067	1065	1066	1063	1051	1056
24	1031	1027	1033	1042	1048	1055	1055	1056	1055	1055	1051	1043	1038	1044	1054	1063	1067	1070	1067	1064	1067	1065	1061	1056	1053
25	1050	1051	1055	1057	1056	1054	1059	1057	1055	1049	1050	1049	1051	1054	1063	1067	1066	1064	1063	1063	1062	1061	1060	1060	1057
26 q	1058	1058	1057	1056	1057	1061	1061	1058	1056	1049	1045	1046	1042	1045	1046	1051	1056	1057	1058	1058	1057	1058	1055	1055	1054
27 q	1056	1057	1057	1056	1056	1055	1052	1051	1051	1049	1048	1042	1034	1037	1039	1045	1051	1058	1058	1055	1052	1052	1051	1048	1050
28	1045	1045	1049	1050	1051	1050	1049	1049	1046	1045	1042	1030	1029	1032	1037	1049	1050	1051	1050	1050	1050	1050	1050	1050	1046
29 q	1049	1049	1050	1050	1052	1051	1044	1043	1046	1037	1031	1021	1024	1027	1028	1033	1039	1047	1049	1049	1049	1049	1049	1045	1042
30	1040	1042	1043	1044	1047	1048	1046	1044	1040	1033	1027	1024	1025	1029	1037	1038	1039	1043	1047	1049	1048	1050	1050	1049	1041
31	1046	1045	1045	1047	1050	1053	1052	1050	1049	1042	1029	1027	1027	1033	1038	1045	1049	1051	1049	1048	1050	1051	1050	1045	1045
Mean	1047	1043	*1037*	1039	1044	1048	1046	1044	1047	1047	1052	1056	1049	1056	1062	1065	1066	1067	*1068*	1067	1065	1059	1056	1054	1054

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

129 ESKDALEMUIR — JULY 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	0 7	562	492	9 0	70	14 10	56·6	40·1	6 42	16·5	19 55	1053	1009	5 33	44	3,3,2,2,2,2,2,2	18	0	86·7
2	20 19	542	484	7 31	*58*	2 44	55·5	42·8	7 32	12·7	21 20	1051	1028	3 4	23	3,3,2,2,2,2,2,1	17	0	86·7
3	16 38	593	497	11 13	96	16 37	56·5	43·3	5 36	13·2	17 10	1064	1016	12 47	48	3,1,1,2,3,4,3,2	19	1	86·8
4 d	18 30	621	480	20 59	141	15 35	56·0	34·8	21 8	21·2	20 10	1131	1006	6 3	125	1,4,3,3,2,3,5,4	25	1	86·9
5 d	* *	*>1069*	*-300*	8 30	*>1369*	21 14	*104·4*	*-51·3*	13 10	*155·7*	11 6	*1504*	*822*	7 25	*682*	6,5,8,8,8,8,5,7	55	2	86·9
6 d	15 7	684	390	7 37	294	18 39	64·9	36·2	16 1	28·7	14 33	1166	1030	24 0	136	2,2,3,4,6,5,5,3	30	2	86·9
7 d	18 2	625	289	4 8	336	2 47	65·2	32·5	1 6	32·7	16 27	1094	844	2 47	250	6,6,4,3,3,4,5,3	34	2	86·9
8	19 40	561	425	8 20	136	13 30	55·8	38·9	19 31	16·9	16 49	1103	1056	7 13	47	1,2,3,3,4,3,3,1	20	1	87·0
9	21 2	592	456	14 8	136	13 29	55·9	40·4	23 21	15·5	18 52	1075	1031	24 0	44	1,1,2,3,3,3,4,4	21	1	87·0
10	16 14	581	457	22 23	124	14 35	59·4	31·8	23 0	27·6	17 35	1103	1019	22 48	84	3,2,2,2,3,3,4,4	23	1	87·1
11	20 11	523	453	10 50	70	14 32	53·2	43·3	5 44	9·9	17 48	1079	1045	12 2	34	3,2,3,2,2,1,2,0	15	0	87·1
12	20 26	532	454	13 32	78	12 55	56·5	44·8	5 44	11·7	17 2	1069	1045	11 40	24	2,1,3,2,3,1,2,2	16	0	87·1
13 q	18 32	526	458	10 0	68	13 40	56·3	41·3	6 41	15·0	19 48	1067	1045	12 5	22	1,1,1,2,2,2,1,1	11	0	87·1
14 q	19 11	534	468	13 5	66	14 19	53·3	42·4	5 20	10·9	21 28	1067	1054	12 57	*13*	0,0,2,1,2,1,2,2	10	0	87·2
15	18 33	546	461	10 55	85	14 50	54·2	40·6	6 12	13·6	5 0	1061	1038	13 11	23	1,0,2,2,3,1,2,1	12	0	87·2
16	14 33	566	481	11 10	85	14 39	60·0	35·8	5 43	24·2	18 47	1079	1038	12 13	41	2,3,2,3,4,4,3,2	23	1	87·2
17	17 34	561	463	0 49	98	14 8	54·6	40·4	7 37	14·2	19 16	1069	1036	1 35	33	3,2,2,2,2,3,2,2	18	1	87·2
18	18 59	552	472	13 1	80	13 22	52·8	39·3	7 50	13·5	19 17	1064	1030	1 11	34	3,1,1,2,2,2,3,1	15	0	87·2
19	19 3	542	476	12 15	66	12 39) 13 11)	54·0	39·6	5 23	14·4	16 6	1064	1033	3 23	31	2,3,1,1,2,2,2,2	15	0	87·2
20	18 28	558	473	8 38	85	14 4	55·1	38·7	8 7	16·4	20 50	1068	1030	13 55	38	1,2,2,2,3,3,3,2	18	1	87·2
21 d	20 3	573	336	9 18	237	6 12	58·9	33·6	20 40	25·3	20 0	1111	995	6 35	116	3,4,5,5,3,3,4,2	29	1	87·3
22	22 58	565	446	2 6	119	14 28	57·4	37·3	4 49	20·1	16 10	1086	1021	2 33	65	4,3,2,3,4,4,2,3	25	1	87·3
23	0 39	545	436	11 9	109	13 12	56·7	42·0	23 57	14·7	17 8	1078	1021	1 58	57	3,2,3,3,3,2,2,3	21	1	87·3
24	19 29	559	469	9 44	90	13 22	55·9	39·7	8 9	16·2	17 51	1072	1026	1 23	46	3,2,2,2,3,3,3,2	20	1	87·4
25	2 42	546	473	7 43) 11 5)	73	14 51	54·1	37·2	6 22	16·9	15 41	1067	1048	9 30	19	2,2,3,2,3,2,2,1	17	1	87·4
26 q	17 26	537	470	12 17	67	14 42	55·8	41·3	7 33	14·5	6 21	1062	1041	12 13	21	0,1,2,2,2,2,1,1	11	0	87·4
27 q	20 7	539	476	11 30	63	14 38	56·7	40·6	7 19	16·1	18 2	1061	1033	12 35	28	0,1,1,1,2,1,1,2	9	0	87·4
28	18 51	550	464	11 7	86	13 23	58·0	43·2	5 38	14·8	4 50	1052	1027	12 4	25	1,1,1,2,2,1,1,0	9	0	87·4
29 q	23 56	548	484	13 17	64	13 52	54·9	41·6	6 48	13·3	5 10	1054	1020	11 49	34	0,1,1,1,2,2,1,2	10	0	87·4
30	20 53	542	476	11 37	66	14 15	55·9	40·4	5 18	15·5	21 38	1052	1021	11 42	31	1,1,1,2,1,1,1,2	10	0	87·5
31	19 41	556	475	11 31	81	13 20	56·5	40·1	22 31	16·4	5 20	1054	1026	12 9	28	2,0,1,2,2,2,3,3	15	0	87·6
Mean	- -	578	430	- -	148	- -	58·1	36·5	- -	21·6	- -	1090	1017	- -	72	-	-	0·61	87·2

q denotes an international quiet day and d an international disturbed day.

* * Between 14h.30m. and 15h.0m.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

130 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	528	526	525	523	526	523	522	518	498	498	499	503	509	509	513	522	533	533	541	565	554	532	523	515	522
2 d	533	521	522	548	542	527	483	486	464	471	475	490	490	514	494	545	565	581	568	538	514	518	495	503	516
3	495	498	502	503	502	494	483	488	477	471	467	467	476	487	502	533	530	573	534	525	522	521	510	507	503
4 d	513	537	521	541	463	541	499	445	423	424	406	424	463	526	767	682	678	593	510	513	487	459	431	370	509
5	331	484	436	448	474	476	474	456	444	441	451	473	490	514	538	542	553	539	525	527	519	507	510	519	486
6	501	503	501	502	495	487	451	471	456	463	474	480	494	518	530	556	510	535	553	548	542	508	508	488	503
7	468	500	494	490	484	500	490	469	456	454	461	466	478	489	502	511	514	520	526	526	525	523	522	528	496
8	503	506	509	507	503	499	495	494	492	486	475	475	481	487	503	518	516	516	520	530	522	519	516	515	504
9 q	518	517	514	513	512	509	507	496	484	473	479	483	486	495	503	512	519	520	524	528	530	531	527	523	508
10 q	519	518	520	516	518	517	516	512	507	495	488	482	482	493	507	520	526	530	537	539	539	539	540	530	516
11	530	519	530	525	528	525	521	507	498	499	501	503	514	507	522	538	533	539	557	540	526	527	520	519	522
12	519	521	526	523	519	512	514	511	499	487	480	483	495	496	503	514	526	528	533	537	541	533	530	538	515
13	520	515	522	522	524	517	514	508	503	495	491	488	498	502	507	531	533	530	540	540	535	536	537	553	519
14	530	522	521	515	505	525	526	514	502	491	486	487	498	506	514	525	534	530	529	530	529	527	526	524	517
15	527	530	518	517	519	515	512	507	499	491	494	500	512	514	521	518	520	519	523	526	523	522	519	520	515
16 q	519	518	518	518	518	515	514	510	503	495	491	486	487	514	504	507	514	527	534	533	527	529	525	525	514
17 q	526	530	526	515	521	519	518	513	507	496	492	486	493	502	511	517	519	523	528	533	534	533	533	530	517
18	524	525	525	526	523	521	518	514	510	508	510	507	518	522	518	540	528	526	541	545	544	529	525	539	*524*
19	534	542	537	538	533	526	525	506	499	499	484	486	459	490	495	517	530	511	533	525	526	526	530	528	516
20	517	518	522	522	519	521	509	502	492	491	490	494	501	509	521	525	528	537	532	534	530	531	530	530	517
21	537	533	525	517	520	521	518	513	513	506	502	500	502	504	507	505	526	524	556	533	529	531	533	537	521
22	518	521	524	522	522	519	514	508	502	491	487	495	505	514	514	518	522	522	532	534	537	528	526	522	517
23 q	523	523	527	528	525	520	514	503	499	493	486	486	491	499	506	514	525	529	537	540	537	538	539	530	517
24	529	523	526	528	532	514	510	507	490	475	487	499	504	510	514	518	533	539	541	538	533	533	527	519	518
25	521	525	526	526	525	520	514	499	487	475	486	495	511	518	526	533	533	557	561	546	518	521	523	530	520
26 d	527	530	526	523	523	517	522	518	499	483	479	471	468	479	525	526	529	527	530	518	503	502	494	453	507
27 d	425	464	503	510	528	495	503	471	434	435	382	420	445	503	495	510	505	506	526	521	495	495	518	490	*482*
28	502	499	499	489	498	499	502	463	454	446	424	464	471	487	499	500	505	510	522	522	525	523	528	518	494
29 d	514	498	506	506	491	517	516	502	494	443	476	490	503	499	490	504	531	565	521	517	529	498	500	530	506
30	452	494	507	517	507	518	515	502	491	478	479	482	479	489	514	519	522	523	530	533	533	518	519	526	506
31	519	526	515	499	500	491	502	514	508	498	495	503	495	513	519	523	528	514	528	529	530	545	529	525	515
Mean	507	516	515	515	513	513	507	498	487	479	*477*	483	490	503	519	527	531	533	*535*	533	527	522	519	516	511

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

131 ESKDALEMUIR (D) — 12° + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	45·2	45·1	45·7	46·1	45·1	44·1	43·9	44·2	44·5	48·8	48·5	50·7	54·0	56·7	55·8	54·0	52·2	51·5	51·4	47·7	47·9	45·4	46·9	46·0	48·4
2 d	48·2	43·1	53·3	42·9	44·8	45·0	47·7	52·9	48·6	48·8	50·5	50·6	54·1	54·1	53·9	48·6	49·5	50·6	49·6	48·9	51·0	52·1	53·0	53·1	*49·8*
3	51·2	48·8	44·9	45·0	44·9	46·2	48·8	46·9	44·9	45·7	47·5	49·6	52·8	53·7	52·3	52·1	47·8	44·1	46·9	46·8	46·9	44·1	47·1	47·9	47·8
4 d	47·1	45·8	38·7	40·4	44·7	36·7	40·5	34·4	42·3	51·5	51·4	51·4	50·2	54·2	55·6	55·8	57·6	45·0	48·5	49·5	48·6	41·2	40·1	36·0	46·1
5	52·6	36·1	38·7	36·1	38·9	37·6	37·5	39·1	41·5	42·6	45·9	49·5	53·3	56·1	56·6	56·5	52·7	50·5	49·5	49·3	43·1	46·1	46·6	47·4	46·0
6	45·0	45·8	42·2	42·3	40·7	39·5	45·8	43·5	44·5	45·9	49·1	53·0	56·3	56·8	56·1	53·3	51·3	50·8	48·2	46·9	46·8	45·1	46·0	54·0	47·9
7	35·3	31·7	37·3	38·8	43·3	42·6	42·3	43·7	45·2	47·2	49·7	53·5	54·8	56·0	55·3	53·4	50·9	48·1	47·9	49·6	49·6	47·9	43·1	45·8	46·4
8	45·3	45·8	45·5	44·4	44·6	44·2	45·1	43·9	43·8	44·1	47·0	51·2	53·7	54·5	54·3	52·2	49·2	48·0	47·7	47·9	47·5	46·2	46·9	46·7	47·5
9 q	46·9	46·3	46·6	46·0	45·6	44·2	42·8	41·6	40·5	41·6	44·7	49·4	53·1	54·5	53·4	52·0	50·9	49·7	48·4	48·4	48·3	47·4	45·9	47·0	47·3
10 q	46·4	46·2	48·0	46·7	45·5	44·1	43·7	43·2	43·2	44·2	47·0	49·8	52·8	54·8	55·1	53·3	51·2	49·2	48·6	48·5	48·1	47·9	47·7	46·9	48·0
11	45·0	42·5	43·4	43·9	44·4	42·0	40·1	39·4	40·9	43·8	46·6	50·2	53·8	55·1	55·8	54·9	52·4	50·2	49·2	45·8	46·7	47·3	46·5	43·8	46·8
12	45·7	44·6	45·6	44·7	43·3	41·2	42·5	42·1	42·2	44·9	47·9	51·5	54·8	55·9	54·7	53·4	51·6	48·9	47·9	47·9	48·5	47·0	46·3	43·5	47·4
13	42·3	43·3	45·2	46·3	43·5	41·4	42·6	42·9	42·3	43·2	46·8	50·2	53·9	55·0	54·8	54·8	53·1	50·5	47·8	48·1	48·1	47·9	48·1	46·9	47·5
14	42·5	42·5	44·2	43·7	47·3	45·6	43·4	43·0	44·1	44·8	46·0	49·8	53·0	55·8	55·5	53·9	51·4	49·1	48·4	48·5	47·3	46·8	47·1	47·4	47·5
15	47·4	44·2	42·5	43·2	42·2	41·5	42·7	43·3	43·7	45·8	48·6	51·1	53·8	54·1	53·2	50·8	49·7	48·4	47·5	47·5	47·6	47·3	47·0	46·8	47·1
16 q	46·7	46·5	46·2	46·0	45·4	44·9	43·9	43·3	43·5	43·5	46·0	49·5	52·1	54·8	53·4	52·3	50·6	49·3	47·1	46·4	46·7	46·9	47·0	46·7	47·4
17 q	46·7	45·9	42·4	43·4	44·5	44·0	43·3	43·3	43·3	44·2	46·3	49·5	52·5	53·2	53·0	51·4	49·5	48·5	47·6	47·7	47·7	47·7	47·5	45·4	47·0
18	45·6	45·9	45·8	45·2	44·9	44·0	43·2	43·4	44·7	46·8	47·9	51·0	53·1	53·4	52·2	52·9	51·7	50·3	49·6	49·7	47·6	43·3	45·7	47·0	47·7
19	45·7	45·0	45·7	41·2	43·2	42·5	41·6	40·6	44·1	47·6	49·8	52·4	57·0	57·1	55·5	51·5	50·2	45·9	47·6	47·7	47·4	46·6	47·6	44·4	47·4
20	46·0	48·7	47·8	45·2	44·2	43·2	41·6	42·4	44·2	46·4	49·8	51·7	53·6	54·6	53·9	51·1	48·2	47·1	47·8	48·4	48·5	48·2	47·9	47·0	47·8
21	49·2	45·5	44·8	45·6	45·2	44·6	41·5	41·3	42·7	45·9	47·9	50·1	53·6	55·3	54·6	52·7	50·5	48·5	49·1	44·5	47·3	48·1	47·5	46·3	47·6
22	45·0	45·9	45·7	45·2	45·3	44·7	44·0	43·4	43·4	44·1	46·1	49·6	53·7	54·9	54·7	53·1	51·5	49·6	48·6	47·9	47·3	46·1	46·0	46·0	47·6
23 q	46·1	46·0	45·9	45·9	45·2	44·2	43·4	42·6	43·1	44·3	48·4	51·3	53·5	54·8	54·7	53·4	51·3	48·8	47·7	47·6	46·7	47·6	45·9	45·0	47·6
24	44·1	44·3	44·1	43·3	43·2	41·5	41·3	41·2	43·1	46·2	50·3	53·9	55·9	56·7	54·9	52·5	50·4	48·6	47·7	46·6	44·5	45·8	46·1	45·0	47·1
25	45·7	46·3	45·8	45·0	44·1	43·1	43·1	43·2	43·4	47·4	51·5	54·0	55·7	55·3	53·3	51·7	49·4	49·1	49·0	43·1	41·8	44·9	45·2	46·6	47·4
26 d	49·5	48·4	42·5	44·3	43·5	43·4	44·0	43·3	44·9	50·7	53·3	56·7	61·2	60·5	58·6	55·2	53·7	52·8	46·1	45·4	37·8	40·3	31·3	32·5	47·5
27 d	37·8	50·2	46·8	43·3	42·1	44·3	47·2	46·9	46·9	48·1	49·5	52·4	54·7	57·6	58·6	54·0	51·9	49·4	40·6	34·3	38·1	40·7	31·1	41·6	46·2
28	47·3	49·0	43·8	44·1	46·8	43·4	40·7	44·5	48·3	49·1	48·4	52·7	55·5	55·7	53·3	51·2	48·7	46·8	45·3	46·6	48·1	47·5	46·1	46·1	47·9
29 d	44·2	44·5	44·3	45·9	47·6	46·5	41·6	42·2	42·7	46·7	49·4	50·3	51·9	53·1	50·2	49·6	49·2	39·8	44·3	43·9	42·3	45·0	44·2	46·6	46·1
30	49·7	36·8	40·6	44·9	43·6	41·6	41·4	41·7	42·6	43·9	48·6	50·8	52·5	52·9	47·7	48·5	48·5	47·9	46·9	42·5	43·6	47·2	46·8	49·8	*45·9*
31	46·9	48·6	43·4	43·7	44·8	44·9	45·0	43·1	42·8	45·0	48·5	52·0	54·8	55·0	53·1	52·0	50·1	48·7	48·5	48·1	43·1	48·3	45·1	45·7	47·5
Mean	45·9	44·8	44·4	44·0	44·3	43·1	43·1	*42·9*	43·7	45·9	48·3	51·3	54·1	*55·2*	54·3	52·7	50·9	48·6	47·8	46·8	46·3	46·3	45·5	45·8	47·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

132 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — AUGUST 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1041	1039	1043	1044	1050	1051	1048	1047	1045	1038	1031	1027	1020	1025	1038	1044	1045	1056	1062	1063	1062	1057	1053	1051	1045
2 d	1044	1032	1030	1002	1018	1031	1043	1032	1034	1031	1032	1034	1039	1051	1082	1128	1151	1141	1129	1111	1093	1068	1056	1044	*1061*
3	1045	1045	1051	1054	1055	1054	1043	1041	1045	1044	1042	1038	1038	1051	1062	1070	1084	1089	1080	1077	1072	1062	1055	1054	1056
4 d	1050	1022	992	1010	974	905	943	986	1004	1000	1014	1037	1087	1141	1274	1218	1234	1215	1159	1128	1089	1041	985	947	1061
5	870	917	923	974	1025	1050	1062	1066	1063	1058	1051	1048	1050	1056	1077	1092	1102	1101	1092	1084	1083	1073	1066	1050	1043
6	1049	1054	1053	1053	1048	1051	1039	1034	1038	1039	1042	1042	1039	1051	1062	1084	1085	1080	1091	1086	1080	1045	1034	1001	1053
7	981	989	1007	1033	1044	1041	1051	1050	1050	1045	1041	1042	1043	1045	1051	1059	1071	1080	1075	1064	1060	1057	1059	1045	1045
8	1047	1051	1054	1056	1056	1055	1055	1052	1050	1047	1050	1053	1050	1050	1054	1059	1062	1062	1060	1056	1057	1060	1057	1056	1055
9 q	1056	1055	1055	1056	1057	1057	1056	1056	1055	1053	1041	1035	1036	1039	1045	1048	1055	1056	1054	1054	1054	1054	1054	1051	1051
10 q	1054	1055	1051	1050	1054	1055	1054	1051	1051	1046	1042	1039	1036	1037	1046	1048	1052	1054	1054	1054	1051	1050	1050	1051	1049
11	1050	1051	1049	1049	1053	1056	1055	1053	1050	1041	1034	1026	1025	1028	1032	1040	1050	1056	1057	1065	1061	1056	1056	1055	1048
12	1053	1051	1047	1044	1049	1052	1050	1049	1046	1045	1041	1039	1039	1045	1046	1048	1051	1056	1056	1051	1048	1050	1051	1044	1048
13	1044	1045	1045	1045	1047	1050	1050	1047	1044	1038	1031	1027	1028	1034	1044	1050	1057	1061	1060	1054	1052	1050	1046	1029	1045
14	1034	1038	1042	1044	1040	1037	1038	1039	1041	1039	1032	1031	1028	1032	1043	1047	1051	1058	1057	1053	1051	1050	1050	1048	1043
15	1044	1042	1039	1043	1045	1044	1040	1039	1045	1045	1038	1033	1034	1039	1046	1050	1050	1051	1054	1050	1050	1048	1048	1049	1044
16 q	1048	1049	1049	1049	1050	1050	1050	1050	1045	1039	1039	1032	1021	1024	1036	1039	1046	1054	1057	1060	1055	1051	1050	1050	1046
17 q	1049	1045	1043	1045	1045	1049	1049	1049	1045	1044	1037	1032	1031	1031	1038	1044	1048	1050	1050	1050	1049	1048	1048	1048	1044
18	1049	1048	1048	1047	1049	1048	1044	1043	1042	1037	1031	1027	1030	1031	1037	1042	1044	1044	1044	1047	1050	1056	1051	1047	1043
19	1044	1039	1038	1032	1039	1038	1037	1037	1032	1032	1033	1031	1032	1036	1050	1060	1075	1077	1065	1059	1056	1055	1051	1043	1045
20	1044	1043	1041	1045	1050	1050	1051	1050	1050	1047	1039	1044	1049	1050	1056	1060	1061	1060	1056	1052	1052	1052	1051	1048	1050
21	1042	1039	1044	1047	1045	1045	1044	1040	1035	1028	1026	1026	1026	1029	1039	1044	1051	1052	1050	1063	1058	1051	1050	1043	*1042*
22	1044	1046	1045	1048	1048	1049	1050	1050	1050	1049	1042	1030	1026	1032	1039	1044	1045	1044	1044	1045	1048	1053	1051	1050	1045
23 q	1048	1048	1046	1048	1049	1050	1050	1051	1051	1045	1043	1035	1028	1027	1033	1037	1041	1044	1044	1043	1044	1044	1044	1045	1043
24	1044	1044	1044	1044	1046	1051	1051	1049	1047	1038	1028	1023	1026	1032	1042	1048	1050	1053	1053	1054	1056	1050	1050	1048	1045
25	1048	1047	1047	1049	1050	1051	1051	1052	1050	1041	1032	1030	1032	1038	1044	1050	1050	1049	1059	1074	1074	1065	1057	1041	1049
26 d	1020	1002	1031	1042	1048	1049	1045	1045	1041	1032	1029	1034	1039	1047	1062	1078	1090	1111	1122	1111	1076	1056	1034	1026	1053
27 d	914	887	930	993	1023	1023	1028	1035	1039	1045	1056	1069	1086	1093	1117	1137	1118	1110	1110	1101	1078	1050	1007	1020	1045
28	992	1007	1030	1041	1050	1053	1060	1057	1048	1048	1056	1061	1052	1057	1066	1067	1068	1075	1071	1068	1061	1060	1051	1050	1052
29 d	1047	1043	1042	1050	1038	1038	1047	1050	1051	1058	1050	1049	1050	1059	1086	1084	1092	1120	1104	1097	1068	1042	1051	1032	1060
30	984	1024	1028	1021	1010	1028	1039	1051	1056	1055	1050	1052	1050	1056	1074	1076	1075	1073	1073	1072	1059	1051	1050	1038	1048
31	1041	1043	1048	1052	1050	1046	1043	1046	1053	1051	1050	1044	1042	1044	1051	1056	1062	1066	1062	1061	1063	1054	1050	1050	1051
Mean	*1030*	1030	1033	1039	1042	1042	1044	1045	1045	1042	1039	1038	1039	1045	1060	1066	1071	*1074*	1071	1068	1062	1053	1047	1041	1049

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

133 ESKDALEMUIR — AUGUST 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 16,000γ +		Minimum 16,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A
1	19 27	587	490	8 47	97	13 43 57·3	43·3 7 38	14·0	19 11	1068	1019	12 50	49	1,1,2,2,2,2,3,3	16	0	87·6
2 d	16 7	595	444	8 40	151	2 43 62·1	39·6 3 27	22·5	16 12	1157	990	3 2	167	4,3,4,4,4,4,4,4	31	1	87·6
3	17 22	606	453	10 56	153	13 1 54·5	38·8 21 40	15·7	17 15	1092	1035	12 17	57	2,3,3,2,2,4,2,3	21	1	87·7
4 d	14 28	*888*	311	23 40	*577*	14 38 *74·1*	25·5 23 38	*48·6*	16 54	*1385*	882	5 6	*503*	4,6,5,4,7,6,5,6	43	2	87·7
5	16 51	571	*257*	0 41	314	0 9 62·8	28·0 1 41	34·8	17 11	1105	*829*	0 45	276	7,5,2,3,3,3,3,3	29	2	87·8
6	15 48	581	431	6 42	150	13 20 58·1	38·7 5 19	19·4	18 52	1098	972	23 47	126	2,2,3,3,3,4,3,4	24	1	87·8
7	16 59	540	410	0 42	130	13 6 56·9	26·9 1 18	30·0	17 11	1082	972	0 40	110	4,3,3,3,2,3,2,3	23	1	87·7
8	19 41	540	466	11 3	74	13 46 54·9	43·1 9 3	11·8	16 10	1062	1044	0 1	*18*	2,4,2,2,2,2,2,1	17	0	87·7
9 q	21 32	539	471	9 49	68	13 20 55·1	40·0 8 32	15·1	5 1	1059	1033	11 42	26	1,1,1,1,2,1,1,1	9	0	87·7
10 q	22 24	545	480	11 45	65	14 1 55·3	42·7 7 47	12·6	5 9	1056	1033	13 1	23	2,1,1,2,1,0,1,2	10	0	87·8
11	18 29	568	489	9 52	79	14 19 56·4	37·9 8 1	18·5	19 15	1067	1023	12 31	44	2,1,2,2,3,2,3,2	17	0	87·8
12	23 27	550	471	10 39	79	13 6 57·3	40·0 5 32	17·3	17 51	1056	1038	12 12	*18*	2,2,2,2,3,2,2,3	18	0	87·7
13	23 5	564	480	11 21	84	13 40 56·5	40·6 7 36	15·9	16 52	1062	1025	11 52	37	2,2,2,2,2,3,2,3	18	1	87·8
14	16 37	541	477	10 50	64	13 47 56·5	41·4 7 41	15·1	17 50	1060	1026	12 50	34	1,3,2,2,2,2,2,1	15	0	87·9
15	1 39	541	485	9 44	56	12 46 54·9	41·4 5 36	13·5	18 9	1055	1032	11 44	23	2,1,1,2,2,2,1,0	11	0	87·9
16 q	18 58	543	479	12 11	64	13 33 55·4	43·1 7 13	12·3	19 7	1061	1020	12 56	41	1,1,1,2,3,2,2,1	13	0	88·0
17 q	19 20	540	482	11 19	58	14 51 53·8	42·2 2 47	*11·6*	18 21	1051	1029	12 25	22	2,2,1,1,0,1,2,1	10	0	87·9
18	19 14	557	503	11 14	*54*	13 17 53·9	42·3 21 7	*11·6*	21 3	1057	1026	12 37	31	1,0,2,1,2,3,2,3	14	0	88·0
19	1 33	565	440	12 3	125	12 49 59·3	37·8 7 11	21·5	16 55	1081	1026	3 3	55	3,3,2,3,3,4,3,3	24	1	88·0
20	23 36	541	487	10 20	*54*	13 40 55·0	41·2 6 35	13·8	16 47	1062	1038	10 42	24	2,1,1,1,1,1,1,2	10	0	88·0
21	18 36	579	484	15 20	95	13 24 56·0	40·7 7 41	15·3	19 43	1068	1025	12 10	43	2,2,2,2,2,3,3,2	18	1	88·0
22	20 18	550	487	10 8	63	13 17 55·0	43·3 8 55	11·7	21 13	1055	1025	12 0	30	2,1,1,2,2,2,2,1	13	0	88·0
23 q	22 8	546	483	10 49	63	13 20 55·0	42·4 7 52	12·6	7 30	1054	1026	13 7	28	1,1,1,1,0,1,1,2	8	0	88·1
24	19 27	553	468	9 16	85	13 32 57·0	39·7 7 29	17·3	20 2	1058	1020	11 42	38	2,2,2,3,2,2,2,2	17	0	88·0
25	17 51	577	474	9 35	103	12 54 56·4	38·9 19 51	17·5	19 44	1080	1028	24 0	52	2,1,1,3,2,3,3,3	18	1	88·1
26 d	18 29	557	404	24 0	153	0 51 62·8	28·9 22 10	33·9	18 9	1137	960	24 0	177	4,2,2,2,4,4,4,4	26	2	88·1
27 d	22 34	573	350	10 18	223	14 24 61·4	*17·9* 22 31	43·5	15 42	1146	840	1 53	306	5,4,4,4,5,4,4,5	35	2	88·0
28	22 37	550	408	10 30	142	13 23 56·4	38·0 6 46	18·4	17 34	1079	974	0 52	105	4,3,3,4,3,3,2,3	25	1	88·0
29 d	17 39	607	420	9 34	187	14 0 56·7	31·5 17 25	25·2	17 20	1134	990	24 0	144	2,4,2,4,4,4,3,4	27	1	88·0
30	3 16	569	420	0 43	149	13 4 54·0	34·2 19 49	19·8	14 56	1080	972	0 33	108	4,4,3,2,4,3,3,2	25	1	88·0
31	21 32	561	482	10 30	79	13 20 56·9	40·3 7 44	16·6	17 20	1068	1037	0 1	31	2,2,3,2,3,3,2,3	20	1	88·0
Mean	- -	572	448	- -	124	- - 57·3	37·8 - -	19·6	- -	1088	1000	- -	89	-	-	0·65	87·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

134 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	513	515	517	512	515	517	496	499	494	476	478	476	479	491	514	494	525	550	522	520	521	522	523	541	509
2	523	518	506	508	510	508	489	483	486	482	472	479	491	494	494	496	524	529	526	533	541	525	522	514	506
3	517	514	510	512	514	512	506	496	483	476	482	487	494	499	503	509	513	518	525	526	525	522	522	522	508
4 q	515	521	514	514	511	508	506	497	491	485	483	484	494	502	509	515	515	523	529	527	525	529	521	522	510
5 q	522	517	518	517	515	510	507	499	494	486	483	494	502	514	514	515	517	519	521	525	524	525	524	525	512
6 q	524	522	522	521	519	519	517	510	502	489	478	479	502	515	521	519	518	525	526	534	531	536	533	530	516
7	531	530	529	529	535	534	529	524	513	504	486	494	522	521	491	515	533	518	526	533	545	514	513	514	*520*
8	517	528	519	510	518	515	514	513	502	490	479	483	492	505	507	514	514	524	529	533	530	523	515	503	512
9	519	523	522	514	517	514	514	514	503	484	483	484	494	498	508	514	518	529	525	523	525	524	526	565	514
10	538	522	510	510	521	511	514	503	495	486	480	484	487	501	510	524	525	529	530	527	529	526	524	524	513
11	524	531	522	525	518	519	511	510	500	487	475	477	482	492	498	502	519	524	519	518	519	528	534	517	510
12 q	522	519	513	516	517	517	514	511	501	490	477	479	491	503	512	511	514	518	521	523	523	523	522	522	511
13 d	522	522	522	521	518	515	514	510	511	506	509	515	514	515	514	467	514	526	517	519	521	502	498	526	513
14	505	514	494	498	501	515	471	471	474	475	472	474	476	491	498	494	521	522	516	516	512	518	522	491	498
15 d	495	510	510	506	499	498	494	499	484	483	473	482	479	495	502	531	525	533	506	510	483	494	507	512	500
16	510	518	514	519	501	498	516	507	502	489	484	480	480	488	502	504	511	526	526	506	510	517	524	506	506
17	506	502	510	510	510	505	506	503	487	486	477	476	490	486	494	499	506	509	519	521	525	529	526	528	505
18 d	524	520	515	512	534	576	563	491	424	405	343	272	588	947	676	985	1025	682	473	-278	-410	-313	-137	-137	407
19 d	-407	-278	-260	-169	-200	-120	-32	110	233	392	452	460	471	458	483	501	495	514	530	455	409	471	470	459	*246*
20 d	464	425	444	437	455	476	460	441	420	377	374	447	466	476	459	471	463	462	475	483	483	482	480	480	454
21	480	482	490	455	467	476	475	447	436	428	431	443	459	490	490	522	494	478	486	487	486	483	484	487	473
22 q	490	491	494	494	487	479	475	475	472	463	454	454	458	466	478	486	491	502	506	502	498	498	499	500	484
23	500	500	499	500	498	498	495	486	464	459	451	455	475	475	501	494	510	505	502	506	507	503	503	503	491
24	522	515	506	490	479	491	499	491	487	472	463	465	475	476	494	514	513	516	494	487	480	475	479	413	487
25	476	498	492	491	497	499	506	496	470	456	451	459	459	483	506	490	487	491	494	507	499	487	495	503	487
26	498	499	499	499	501	501	501	498	487	472	462	459	467	472	482	488	494	502	509	511	511	514	510	506	493
27	502	506	510	506	502	505	491	494	490	467	460	464	470	482	478	491	494	503	499	503	510	511	510	519	494
28	514	510	503	502	503	503	502	502	498	483	479	476	483	495	503	507	503	517	514	506	517	507	514	518	502
29	514	511	514	506	522	500	514	510	497	477	459	475	487	505	509	521	521	502	508	518	512	522	529	506	506
30	507	499	503	502	503	506	507	503	491	490	482	459	475	486	498	505	498	507	514	510	524	505	506	510	500
Mean	480	483	482	482	483	487	486	483	476	471	*464*	467	487	507	505	520	*527*	520	513	486	481	483	490	488	490

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

135 ESKDALEMUIR (D) — 12° + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	46·0	45·7	46·5	44·3	44·1	45·8	42·7	42·4	42·2	44·0	45·7	50·3	53·3	55·3	56·7	53·4	48·8	46·7	43·9	45·3	47·2	46·9	46·8	44·9	47·0
2	46·7	47·8	45·0	44·4	43·6	42·4	40·0	42·4	43·4	43·7	48·0	51·5	53·1	53·9	52·2	50·1	47·3	47·2	47·4	46·7	44·5	45·9	45·8	48·0	46·7
3	51·3	46·7	44·8	44·0	43·1	43·1	42·3	42·5	43·5	45·8	48·5	51·1	52·9	53·1	52·1	50·3	48·5	47·4	47·3	47·2	47·3	47·0	47·5	45·4	47·2
4 q	46·8	45·8	44·5	44·0	43·7	43·2	42·2	41·4	42·6	45·8	48·9	52·0	53·9	54·1	52·4	50·1	47·6	46·7	47·5	48·4	48·0	46·1	44·8	45·9	46·9
5 q	45·9	45·0	45·1	45·0	44·3	44·0	43·2	42·5	43·1	45·5	48·0	50·7	52·0	52·1	51·3	49·4	47·8	47·3	47·4	47·7	47·3	47·1	46·8	46·7	46·9
6 q	45·9	45·4	45·4	45·0	45·0	44·9	44·4	44·1	43·7	44·8	48·5	51·2	53·1	53·9	53·0	50·5	49·4	48·7	48·6	48·5	48·5	46·5	46·5	46·7	47·6
7	46·6	45·9	45·9	46·0	44·8	42·5	42·3	40·2	39·7	44·1	46·8	51·2	55·1	58·3	59·4	52·9	53·5	50·5	47·8	49·3	44·1	37·7	44·3	44·8	47·2
8	45·9	44·1	44·0	40·1	41·5	41·6	42·2	43·5	43·3	44·3	46·3	49·4	52·5	52·9	51·7	51·7	50·2	48·6	47·9	47·3	45·0	45·7	42·4	39·6	45·9
9	44·0	43·2	46·8	47·9	47·7	48·0	48·2	48·4	47·8	44·0	46·8	49·4	51·9	52·5	52·0	50·5	48·8	48·1	47·7	46·9	46·1	45·7	44·7	49·5	47·8
10	43·2	41·4	44·4	45·5	46·0	45·6	44·1	42·8	42·7	44·1	46·7	49·9	52·9	54·0	53·3	51·5	48·9	47·8	46·3	45·0	47·0	47·3	46·9	46·7	46·8
11	46·2	45·8	43·4	43·9	43·3	42·0	41·7	41·9	41·7	43·7	46·5	51·6	56·8	59·2	57·5	53·9	50·3	48·6	47·4	46·3	46·1	44·0	44·0	46·9	47·2
12 q	46·8	45·8	47·2	47·7	45·8	45·0	44·3	43·2	43·1	44·0	47·7	51·3	53·4	54·0	52·8	50·2	48·4	47·5	47·7	47·8	47·7	47·0	46·9	46·8	47·6
13 d	46·7	46·6	46·3	46·0	45·8	45·0	44·1	43·0	42·0	43·6	46·8	50·7	54·8	56·3	58·5	56·9	55·9	52·0	46·7	47·9	47·8	39·5	41·3	48·7	*48·0*
14	43·7	47·4	46·3	46·7	48·2	49·4	49·4	51·5	50·4	48·4	48·8	50·3	53·1	52·4	51·4	47·6	47·1	47·3	45·7	43·6	43·7	35·8	33·3	37·8	46·6
15 d	50·3	43·1	42·3	39·9	41·2	45·0	45·0	45·0	44·3	44·4	47·5	50·4	52·4	53·1	51·3	50·5	49·7	49·5	42·5	35·3	41·2	36·0	43·4	45·0	45·3
16	44·3	45·8	38·6	39·6	42·5	48·0	45·0	42·3	41·5	42·3	44·3	47·6	50·1	51·3	51·4	50·5	49·2	47·8	47·3	42·5	48·0	47·6	46·2	41·6	45·6
17	41·3	42·7	42·6	40·6	40·9	41·9	43·1	42·2	39·6	42·5	45·8	49·2	52·7	53·9	52·2	51·3	49·7	44·8	46·2	48·5	47·6	47·0	46·7	46·8	45·8
18 d	46·9	46·9	45·9	45·1	47·4	46·7	42·3	39·6	36·5	52·8	35·7	22·1	44·0	50·2	58·4	58·5	63·9	67·6	49·3	54·9	26·1	27·9	61·2	-24·3	43·6
19 d	-15·3	-8·1	-11·7	1·8	<3·6	45·0	53·1	64·8	60·7	45·0	45·9	47·6	49·5	47·5	49·6	50·2	49·3	50·5	52·0	43·9	50·7	44·1	42·9	42·3	*37·7*
20 d	45·9	46·4	41·2	39·4	39·4	39·9	40·7	41·9	44·3	46·8	47·6	49·5	53·4	53·5	53·7	51·2	47·7	45·0	44·0	45·8	45·7	44·3	45·0	44·9	45·7
21	44·9	44·8	43·5	49·5	41·4	41·7	46·6	45·8	46·9	48·4	48·5	51·3	50·7	53·9	53·5	48·5	46·5	47·0	46·9	46·9	46·7	46·0	45·8	45·7	47·1
22 q	45·0	44·6	44·3	44·0	44·1	43·6	44·2	43·5	43·2	44·0	45·7	48·3	50·8	52·2	51·4	50·2	47·8	46·9	46·9	46·8	46·2	45·8	45·9	46·0	46·3
23	45·5	45·4	44·8	44·4	44·7	44·4	43·4	41·5	43·2	44·0	46·1	49·6	54·1	57·5	59·2	58·4	54·0	52·2	48·8	48·1	44·4	45·0	45·1	45·1	47·9
24	48·7	44·5	40·5	40·6	44·7	44·8	42·5	42·6	42·4	43·5	46·0	50·8	55·2	57·6	55·8	55·1	52·9	50·5	42·2	37·2	36·0	34·2	29·5	40·5	44·9
25	27·1	37·6	40·4	42·1	45·2	43·3	42·5	42·4	43·2	47·5	49·5	52·5	53·6	51·5	52·2	52·3	48·8	47·5	47·0	40·5	34·3	43·5	43·4	45·1	44·7
26	44·8	44·9	45·0	45·0	45·3	44·9	44·1	43·0	41·7	42·1	44·6	48·1	50·9	51·4	51·4	49·5	47·7	47·0	47·1	47·0	46·9	46·7	44·2	45·1	46·2
27	47·3	43·6	44·8	41·8	43·4	43·8	45·1	48·4	47·8	48·8	52·4	54·6	55·0	55·2	52·3	51·2	45·9	45·7	46·0	45·9	46·0	46·0	45·9	44·6	47·6
28	44·1	44·7	43·5	43·5	44·0	43·2	43·1	42·9	42·3	43·2	45·6	48·6	50·3	51·1	50·7	50·2	49·3	49·7	50·3	48·1	46·7	42·5	38·7	45·8	45·9
29	45·9	45·8	44·8	43·7	44·5	43·1	44·6	42·7	42·7	44·2	46·2	49·9	52·0	52·4	51·7	52·2	50·7	48·5	47·5	47·7	45·3	45·1	40·5	42·0	46·4
30	43·5	46·2	44·3	41·9	43·3	44·0	43·1	42·4	42·4	43·2	47·6	50·1	51·1	50·4	50·3	50·5	48·7	47·2	46·7	44·0	36·1	42·1	45·0	44·9	45·4
Mean	43·2	43·2	*42·3*	42·5	42·7	44·2	44·0	44·0	43·7	44·9	46·8	49·4	52·5	*53·5*	53·3	51·6	49·8	48·7	47·0	46·0	44·6	43·5	44·4	42·7	46·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

136 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — SEPTEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1052	1047	1046	1047	1051	1050	1053	1051	1047	1047	1047	1050	1051	1048	1058	1064	1078	1091	1092	1079	1065	1058	1055	1042	1057
2	1029	1029	1040	1051	1053	1057	1060	1056	1051	1047	1038	1036	1039	1051	1061	1063	1065	1065	1064	1059	1051	1047	1048	1039	1050
3	1023	1036	1045	1051	1053	1054	1057	1054	1053	1048	1042	1039	1036	1041	1047	1050	1053	1052	1051	1051	1051	1054	1053	1052	1048
4 q	1053	1052	1052	1053	1052	1053	1055	1054	1052	1046	1042	1042	1041	1045	1050	1053	1053	1052	1048	1048	1051	1051	1052	1051	1050
5 q	1051	1052	1052	1051	1052	1051	1051	1050	1046	1040	1039	1038	1039	1040	1045	1047	1051	1047	1046	1046	1047	1048	1050	1051	1047
6 q	1051	1051	1051	1051	1050	1048	1050	1047	1047	1051	1048	1034	1030	1039	1045	1047	1049	1048	1047	1048	1048	1048	1047	1048	1047
7	1049	1050	1051	1047	1045	1045	1045	1041	1042	1036	1038	1036	1036	1045	1065	1065	1068	1070	1069	1062	1051	1044	1048	1052	1050
8	1049	1042	1029	1038	1044	1046	1046	1042	1041	1042	1041	1039	1040	1042	1047	1053	1052	1052	1051	1051	1053	1052	1046	1048	1045
9	1044	1042	1040	1040	1044	1047	1047	1046	1046	1050	1042	1039	1039	1041	1045	1048	1051	1050	1052	1053	1052	1052	1051	1027	1045
10	1010	1022	1035	1041	1044	1048	1050	1047	1044	1040	1044	1045	1040	1040	1042	1047	1051	1051	1051	1052	1048	1048	1048	1048	1043
11	1047	1042	1040	1041	1044	1047	1050	1046	1044	1039	1035	1033	1033	1040	1053	1057	1059	1062	1065	1064	1061	1055	1044	1039	1047
12 q	1033	1039	1042	1042	1046	1047	1050	1051	1047	1045	1041	1040	1036	1033	1038	1046	1051	1051	1048	1047	1047	1047	1047	1047	1044
13 d	1047	1048	1048	1048	1048	1050	1051	1048	1041	1033	1026	1021	1027	1053	1083	1084	1084	1086	1095	1075	1063	1059	1054	1017	1054
14	1015	1013	1009	1004	1009	1020	1027	1026	1032	1037	1042	1045	1048	1051	1058	1064	1064	1063	1066	1070	1061	1047	1018	1009	1037
15 d	991	996	1017	1035	1039	1039	1041	1045	1047	1048	1046	1045	1047	1054	1061	1056	1052	1052	1086	1099	1072	1046	1045	1048	1046
16	1045	984	1009	1028	1033	1035	1037	1044	1045	1047	1045	1040	1038	1042	1044	1047	1051	1057	1063	1077	1065	1059	1045	1038	1042
17	1037	1041	1041	1047	1048	1048	1047	1045	1040	1036	1034	1035	1035	1041	1048	1056	1063	1081	1075	1063	1057	1053	1052	1051	1049
18 d	1051	1050	1049	1048	1044	1017	1023	1033	1049	1057	1099	1095	1238	1304	1297	1168	1231	1169	950	919	1048	997	752	762	1060
19 d	560	1370	614	452	356	404	764	813	925	1003	1035	1052	1066	1075	1083	1087	1087	1089	1120	1125	963	1052	1087	1077	*927*
20 d	1047	1010	1032	1048	1054	1069	1071	1075	1076	1086	1093	1114	1122	1125	1111	1101	1095	1094	1092	1084	1083	1085	1082	1081	*1080*
21	1081	1081	1075	1027	1011	1052	1059	1063	1068	1075	1081	1087	1092	1092	1092	1129	1126	1094	1082	1077	1076	1077	1078	1078	1077
22 q	1078	1077	1075	1071	1071	1072	1073	1073	1072	1069	1069	1065	1063	1064	1065	1066	1069	1070	1070	1070	1071	1071	1070	1070	1070
23	1071	1071	1072	1072	1071	1071	1071	1071	1074	1066	1064	1061	1062	1070	1083	1110	1126	1137	1108	1089	1080	1077	1072	1070	1080
24	1044	1043	1052	1057	1057	1053	1051	1055	1055	1053	1053	1045	1045	1052	1057	1063	1071	1077	1102	1102	1083	1053	1004	943	1053
25	955	1000	1033	1050	1054	1062	1064	1064	1064	1060	1058	1058	1063	1080	1094	1099	1107	1111	1107	1089	1083	1076	1074	1070	1066
26	1070	1070	1070	1069	1069	1067	1069	1069	1070	1068	1063	1059	1054	1056	1060	1063	1067	1065	1064	1065	1066	1068	1066	1066	1066
27	1064	1060	1058	1053	1057	1059	1061	1058	1057	1062	1056	1053	1053	1060	1067	1078	1097	1093	1089	1083	1077	1070	1069	1062	1067
28	1055	1053	1056	1060	1062	1063	1065	1066	1065	1068	1063	1057	1048	1047	1054	1063	1067	1071	1075	1077	1075	1069	1069	1063	1063
29	1063	1063	1063	1062	1047	1051	1051	1055	1056	1057	1056	1050	1051	1054	1057	1063	1068	1077	1077	1073	1074	1057	1045	1051	1059
30	1054	1035	1020	1045	1053	1057	1059	1058	1060	1057	1051	1051	1048	1051	1056	1063	1071	1069	1069	1072	1074	1063	1063	1063	1057
Mean	1027	1052	1031	1028	*1025*	1029	1043	1045	1049	1050	1051	1050	1055	1063	1069	1070	*1076*	1075	1069	1066	1060	1056	1045	1039	1051

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

137 ESKDALEMUIR — SEPTEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0·2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12°+		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 57	571	467	9 9	104	14 8	58·5	37·8	17 53	20·7	17 50	1101	1033	24 0	68	2,2,2,3,3,4,4,3	23	1	88·0
2	19 54	568	464	11 13	104	13 8	54·9	39·5	6 30	15·4	16 40	1066	1024	0 48	42	3,2,3,3,2,3,3,3	22	1	88·0
3	20 8	531	475	9 30	56	12 50	53·8	41·4	6 42	12·4	6 40	1057	1022	0 35	35	3,1,1,2,2,1,1,1	34	0	88·0
4 q	18 30	535	478	10 20	57	13 10	54·8	40·7	7 37	14·1	7 0	1056	1039	12 32	17	1,1,1,1,1,1,1,2	9	0	88·0
5 q	19 0	529	479	10 15	*50*	13 50	52·2	42·2	7 30	10·0	1 40	1053	1036	11 55	17	1,1,1,2,0,1,1,0	7	0	88·1
6 q	20 8	544	474	11 8	70	13 30	54·1	43·3	8 40	10·8	9 30	1053	1029	12 10	24	0,0,0,1,2,2,2,1	8	0	88·1
7	20 18	573	469	14 41	104	14 12	63·8	32·4	21 0	31·4	17 0	1072	1033	9 48	39	1,3,2,3,4,4,4,4	25	1	88·1
8	20 49	550	471	10 52	79	13 20	53·3	37·9	3 18	15·4	21 22	1058	1028	2 40	30	2,2,2,2,2,1,3,3	17	0	88·1
9	23 22	614	479	11 0	135	23 28	56·4	41·3	6 43	15·1	19 32	1056	1005	23 50	51	3,1,2,1,2,2,2,4	17	1	88·1
10	0 52	541	476	10 32	65	13 48	54·6	40·4	1 10	14·2	19 0	1056	1007	0 1	49	2,2,1,1,2,2,2,1	13	0	88·2
11	21 49	553	470	10 40	83	13 18	59·8	40·7	7 26	19·1	18 53	1067	1030	12 28	37	2,2,1,1,3,2,1,3	15	0	88·2
12 q	20 29	526	471	11 20	55	13 3	55·0	42·4	7 38	12·6	17 10	1053	1029	0 12	24	1,1,1,1,1,1,0,0	6	0	88·2
13 d	14 34	600	409	15 23	191	15 12	63·6	35·9	21 34	27·7	18 22	1102	1003	24 0	99	0,0,1,2,5,5,3,4	20	1	88·2
14	21 42	553	439	7 3	114	12 22	54·8	27·4	21 35	27·4	19 0	1074	1001	3 4	73	3,3,3,2,3,4,3,4	25	1	88·3
15 d	18 9	564	448	21 15	116	0 40) 12 59)	54·5	23·8	19 1	30·7	19 0	1123	976	0 48	147	4,3,3,2,3,3,5,4	27	1	88·3
16	1 8	581	457	1 41	124	1 28	57·6	27·8	1 58	29·8	19 28	1081	967	1 30	114	5,3,2,2,3,2,3,4	24	1	88·3
17	21 54	535	460	8 35	75	13 5	54·8	35·1	8 36	19·7	17 30	1083	1033	10 1	50	2,1,3,1,3,3,2,1	16	0	88·2
18 d	13 40	*990*	*<-457*	* *	*1447*	22 59	*157·1*	*<-103·7*	23 47	*260·8*	13 30	*1437*	446	22 54	*991*	1,5,7,7,9,9,9,9	56	2	88·2
19 d	16 28	563	<-457	† †	1020	7 11	80·4	<-71·1	‡ ‡	151·5	19 44	1159	*<201*	§ §	958	9,9,8,6,4,5,7,4	52	2	88·0
20 d	0 40	514	347	10 7	167	12 51	57·5	35·5	3 13	22·0	13 25	1134	999	1 33	135	4,3,3,5,4,3,2,1	25	1	87·8
21	15 18	556	408	10 11	148	3 35	64·3	37·9	3 12	26·4	16 5	1143	976	3 53	167	2,5,3,3,4,4,1,1	23	1	87·8
22 q	18 36	509	447	11 12	62	13 25	52·6	43·1	8 1	*9·5*	0 1	1079	1063	12 35	*16*	1,2,2,1,1,1,1,1	10	0	87·8
23	15 18	537	437	15 52	100	14 38	60·8	40·7	7 47	20·1	17 38	1144	1058	12 14	86	1,1,2,2,3,4,3,3	19	1	87·8
24	15 28	544	386	23 23	158	13 28	61·9	27·0	22 40	34·9	18 47	1122	923	23 40	199	4,2,3,3,4,3,4,5	28	2	87·7
25	19 20	553	426	0 1	127	12 31	54·8	20·8	0 18	34·0	17 34	1112	917	0 10	195	5,2,3,2,3,2,4,2	23	1	87·7
26	21 57	521	451	11 11	70	14 15	52·6	40·8	8 32	11·8	2 20	1071	1054	12 30	17	2,1,1,2,1,1,1,2	11	0	87·7
27	23 33	529	452	12 6	77	13 19	55·8	40·7	3 56	15·1	16 47	1101	1051	12 33	50	2,2,2,2,2,3,2,2	17	0	87·7
28	17 35	524	473	11 28	51	13 33	52·1	35·9	21 59	16·2	19 00	1078	1045	13 30	33	2,1,1,1,1,2,3,3	14	0	87·5
29	22 30	556	445	10 11	111	13 48	55·3	37·1	5 7) 22 27)	18·2	17 27	1081	1041	22 57	40	2,3,2,3,3,4,2,3	22	1	87·3
30	20 28	549	447	11 28	102	12 2	52·2	35·0	20 47	17·2	20 13	1080	1015	2 20	65	3,2,1,3,2,2,3,3	19	1	87·1
Mean	- -	564	390	- -	174	- -	60·5	28·3	- -	32·1	- -	1098	969	- -	129	-	-	0·67	87·9

q denotes an international quiet day and d an international disturbed day.

* * Between 19h.40m. and 24h.0m. † † Between 0h.18m. and 4h.40m. ‡ ‡ Between 3h.58m. and 4h.10m. § § Between 4h.57m. and 5h.5m.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

138 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	514	510	515	513	510	506	506	507	499	489	483	480	479	486	491	498	509	515	512	511	510	510	510	510	503
2	514	512	512	513	511	508	507	503	497	487	483	486	492	498	499	506	507	512	525	522	502	506	526	509	506
3	505	503	504	506	507	510	506	499	494	488	488	487	484	483	486	496	503	514	521	521	517	511	509	510	502
4 q	514	515	514	514	514	515	512	509	503	491	485	486	494	499	510	510	517	522	526	529	530	525	522	524	512
5	503	509	506	514	517	521	514	506	489	477	483	479	492	503	510	511	514	514	525	523	521	519	517	518	508
6 q	518	512	514	515	519	518	519	515	505	495	494	495	501	500	505	510	511	514	519	526	522	515	518	515	511
7 q	514	514	515	515	514	514	511	507	502	495	491	495	504	509	518	522	521	522	522	523	521	522	525	521	513
8	518	530	526	523	511	506	519	507	498	488	483	482	484	494	504	511	511	486	500	514	514	524	514	512	507
9	512	510	514	514	515	514	510	505	497	479	475	473	484	483	501	515	518	519	519	519	520	525	519	519	507
10	518	518	518	518	520	519	521	517	510	504	498	494	503	510	517	529	533	525	526	524	517	522	510	511	516
11 d	527	533	522	510	514	525	499	523	501	467	443	448	471	463	467	486	502	471	487	519	514	491	467	471	493
12 d	499	498	471	496	502	502	492	471	472	491	486	478	491	494	494	492	494	506	503	506	504	506	507	510	494
13	518	501	506	506	508	508	502	506	502	499	484	485	493	494	503	507	507	502	515	515	510	511	514	524	505
14	514	517	513	509	508	514	519	516	505	492	482	480	489	493	503	496	494	509	510	506	507	510	508	533	505
15	519	507	503	506	508	518	511	488	478	463	452	464	483	483	483	485	483	487	491	491	475	478	498	505	490
16 d	503	503	503	525	521	514	515	507	500	491	486	482	491	482	497	500	510	499	496	509	507	494	499	506	502
17 q	510	510	510	510	514	518	518	503	495	480	478	482	480	494	497	495	507	490	514	514	513	518	518	513	503
18	509	510	510	513	518	518	519	515	499	494	487	487	494	491	495	502	510	514	499	502	510	510	510	511	505
19	511	505	513	521	520	525	509	505	505	496	486	486	490	491	486	494	489	501	508	513	509	506	511	512	504
20	510	509	509	513	521	517	513	497	493	482	481	482	486	490	495	498	504	513	520	519	512	505	509	512	504
21 q	515	511	510	517	516	514	521	517	500	482	474	481	487	497	505	513	516	520	524	521	524	521	521	521	509
22 d	518	511	520	528	528	528	524	524	509	498	486	487	495	513	521	540	535	538	489	486	481	493	489	500	510
23	494	493	494	493	486	494	497	495	483	471	459	466	481	486	490	495	500	507	505	482	493	494	490	484	*489*
24	506	498	503	509	507	513	510	509	506	481	478	481	484	490	500	482	505	509	498	524	501	501	505	523	501
25	513	503	503	509	525	525	514	509	502	493	482	475	482	497	500	509	513	516	514	509	513	513	514	513	506
26	512	509	510	509	513	514	517	516	517	497	477	493	491	497	498	506	513	521	498	504	518	483	491	507	505
27	507	505	505	513	511	511	513	513	510	497	484	485	488	493	497	505	513	514	517	518	517	502	505	509	505
28	509	509	509	514	517	517	516	515	510	508	505	498	502	505	500	503	513	513	517	500	512	512	510	506	509
29	497	522	517	519	519	521	519	521	521	517	509	511	516	516	518	521	521	522	524	520	513	522	524	518	*518*
30	522	521	516	510	520	528	522	522	514	502	502	490	497	501	494	508	514	513	513	509	509	513	510	519	511
31 d	523	513	520	532	567	525	498	495	491	493	490	493	504	516	520	529	539	532	497	490	462	447	411	409	500
Mean	512	510	510	513	515	515	512	508	500	490	*483*	484	491	495	500	506	511	*527*	511	512	509	507	506	492	505

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

139 ESKDALEMUIR (D) — 12° + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	44·8	44·2	44·1	43·9	43·4	42·6	43·9	43·3	42·4	42·1	44·2	47·5	50·8	51·4	50·5	48·9	47·5	46·8	46·1	45·6	45·9	45·7	46·0	46·2	45·7
2	46·3	45·2	45·0	44·9	44·3	44·2	44·1	44·0	43·1	43·6	45·8	47·6	48·9	49·7	49·6	49·3	48·6	48·1	47·8	47·6	43·3	45·2	39·5	39·7	45·6
3	38·6	42·3	44·4	44·6	44·2	44·1	44·1	44·0	44·0	44·6	46·9	49·3	51·1	51·3	51·2	49·7	48·6	47·7	47·5	46·8	46·6	45·2	44·4	45·0	46·1
4 q	46·6	45·2	45·0	44·9	44·9	44·1	43·9	42·8	42·3	43·2	44·9	47·2	49·6	51·1	51·6	49·8	49·5	48·8	48·4	47·8	47·3	46·1	45·3	41·4	46·3
5	38·4	39·9	41·3	43·7	44·4	44·6	44·1	42·5	43·8	44·2	46·6	49·6	51·4	52·1	52·0	49·4	48·4	46·9	47·4	46·7	46·2	46·0	45·8	44·0	45·8
6 q	42·6	43·4	44·8	45·0	45·1	44·9	44·2	43·9	44·0	46·1	46·6	49·7	52·4	52·4	51·4	49·5	47·8	47·6	46·9	47·6	47·0	45·9	45·6	45·8	46·7
7 q	45·9	45·1	44·3	44·2	44·3	44·0	43·3	43·0	42·3	42·5	45·2	47·5	48·9	49·7	49·9	48·7	47·6	47·4	47·8	47·6	46·9	46·3	46·0	45·8	46·0
8	44·1	44·1	37·8	41·5	39·9	42·9	42·8	42·7	41·2	41·3	43·6	47·1	48·9	50·2	51·2	50·1	48·8	47·4	47·9	46·9	45·7	41·7	43·7	45·1	44·9
9	45·4	45·5	45·1	45·3	46·6	43·7	43·6	42·7	42·4	43·3	45·9	49·0	51·7	52·4	51·2	49·5	47·8	47·8	47·8	47·9	45·8	43·7	45·8	45·2	46·5
10	45·3	45·2	45·1	45·1	45·1	44·9	44·5	44·0	43·3	44·2	46·1	49·5	52·3	52·6	50·7	50·6	51·4	51·7	48·9	44·9	39·9	40·2	42·2	43·2	46·3
11 d	46·6	42·9	38·1	40·9	42·6	43·6	48·3	49·7	46·0	43·2	46·1	49·6	52·5	54·2	53·1	49·7	48·7	43·4	40·9	38·6	37·9	39·2	44·4	24·7	44·4
12 d	31·7	38·0	42·9	51·4	41·1	44·4	45·1	51·1	51·7	45·0	45·2	46·8	47·4	48·7	48·9	48·0	40·8	40·1	43·4	45·1	44·9	42·5	42·4	43·2	44·6
13	45·0	43·9	43·3	44·0	44·9	44·9	45·2	46·0	43·1	44·1	45·0	47·2	49·1	49·9	50·1	48·8	47·7	44·9	42·5	45·1	44·8	45·1	44·9	45·9	45·6
14	45·4	45·8	43·6	43·5	44·5	46·0	45·5	44·9	43·4	44·2	47·0	51·0	54·6	54·3	51·0	53·2	48·0	47·7	46·7	45·1	45·3	45·0	44·7	44·7	46·9
15	39·8	43·0	44·0	43·6	46·3	46·7	50·3	47·2	47·8	46·9	48·5	51·3	52·3	53·8	51·7	49·8	46·7	42·9	45·2	39·5	39·1	39·8	40·5	43·4	45·8
16 d	45·0	45·0	44·3	47·0	41·9	43·7	44·5	44·5	43·3	42·3	44·2	47·0	50·7	51·1	49·7	48·4	42·3	46·8	47·0	46·7	43·2	36·2	43·5	44·2	45·1
17 q	45·7	45·3	45·1	44·8	44·4	44·4	44·3	45·5	47·5	45·7	46·1	50·2	49·6	49·5	49·5	46·9	46·1	46·1	45·8	45·6	44·5	44·2	44·0	44·8	46·1
18	45·1	45·8	45·1	45·0	44·8	44·3	45·0	45·2	44·2	46·8	49·5	52·2	52·3	52·0	50·7	48·6	47·2	47·6	48·6	46·9	45·1	44·8	44·5	44·0	*46·9*
19	43·4	44·2	49·4	42·9	41·9	43·4	44·7	47·6	45·7	47·2	50·2	52·1	52·2	52·4	51·6	49·9	45·9	47·2	46·0	45·8	44·3	44·1	44·1	44·5	46·7
20	44·5	44·8	44·2	44·0	42·7	43·1	43·4	45·3	46·7	46·8	49·2	51·3	52·3	52·3	52·0	50·2	48·6	46·9	45·9	45·9	43·6	41·4	42·4	44·3	46·3
21 q	45·7	48·0	45·0	42·5	44·3	44·4	43·6	42·4	41·4	42·5	45·6	48·5	49·5	49·7	49·4	47·8	46·6	46·1	45·9	45·2	44·9	44·9	44·9	44·0	45·5
22 d	42·9	43·9	46·1	45·2	44·2	43·2	44·8	44·2	42·3	43·2	46·6	50·3	53·0	56·0	57·5	56·9	62·8	58·3	39·5	40·8	38·3	43·7	36·6	39·8	46·7
23	44·1	44·3	44·0	44·1	46·7	46·6	44·2	42·9	41·4	42·8	46·0	48·7	51·9	52·9	52·2	50·3	49·4	47·7	34·8	38·9	40·6	39·8	37·8	43·3	44·8
24	44·2	42·7	44·2	43·3	45·7	44·5	44·9	43·3	43·1	42·5	44·9	47·9	51·2	51·3	52·0	49·7	48·6	49·7	49·4	39·8	35·3	41·9	43·1	44·8	45·3
25	44·1	43·3	44·3	48·8	46·1	44·3	43·6	43·0	42·2	42·2	44·0	46·3	48·6	50·2	49·3	48·1	47·6	46·9	46·7	47·0	45·8	44·9	44·8	43·5	45·7
26	43·3	43·3	43·3	42·4	43·1	43·9	44·0	43·2	42·7	43·7	47·4	50·2	51·1	49·7	49·6	48·8	47·8	47·6	47·4	47·9	45·9	41·6	36·9	39·7	45·2
27	39·5	41·5	42·1	42·6	43·9	44·1	44·0	43·4	43·3	43·1	44·4	46·9	49·4	49·6	49·5	48·0	47·0	46·3	45·8	45·8	45·2	42·9	41·7	43·3	44·7
28	43·3	44·0	45·0	45·1	45·1	44·8	44·9	44·4	44·0	43·6	46·0	47·0	48·5	50·3	50·3	49·3	47·5	47·6	41·7	42·9	45·2	42·4	40·9	39·6	45·1
29	43·6	44·5	43·5	44·3	44·4	44·3	44·1	44·2	44·2	44·8	46·1	48·9	49·8	49·6	48·3	47·2	47·1	47·3	46·7	46·6	42·6	43·4	43·1	44·5	45·5
30	50·5	50·2	48·6	49·4	50·3	48·6	48·5	48·4	47·8	44·2	46·9	49·5	51·9	51·8	49·4	46·7	46·8	46·9	45·8	44·3	43·5	43·6	41·6	42·9	47·4
31 d	42·4	43·3	42·6	41·6	42·5	37·9	42·3	40·2	39·7	41·4	43·8	46·8	48·8	52·9	53·0	54·8	60·1	59·8	49·5	59·4	37·8	19·8	24·9	33·6	*44·1*
Mean	43·7	44·1	44·1	44·5	44·3	44·2	44·6	44·5	43·9	43·9	46·1	48·8	50·7	*51·5*	50·9	49·6	48·4	47·7	45·9	45·6	43·6	42·5	*42·5*	42·7	45·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

140 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — OCTOBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1063	1063	1059	1053	1056	1057	1058	1060	1063	1062	1055	1051	1050	1052	1057	1061	1060	1062	1063	1064	1063	1064	1063	1063	1059
2	1060	1060	1060	1059	1059	1059	1060	1060	1060	1059	1055	1053	1049	1051	1056	1059	1060	1059	1058	1062	1076	1072	1057	1048	1059
3	1041	1047	1052	1056	1057	1057	1058	1059	1058	1054	1049	1048	1051	1057	1059	1062	1062	1059	1060	1060	1061	1063	1064	1063	1057
4 q	1058	1057	1058	1058	1058	1058	1058	1058	1057	1057	1053	1051	1051	1052	1053	1053	1053	1053	1054	1054	1054	1058	1059	1058	1056
5	1058	1058	1058	1057	1057	1057	1058	1061	1063	1063	1058	1053	1050	1050	1057	1058	1060	1060	1058	1058	1058	1058	1059	1059	1058
6 q	1059	1059	1059	1058	1058	1057	1057	1056	1057	1053	1053	1050	1051	1057	1057	1060	1065	1062	1060	1058	1059	1062	1062	1061	1058
7 q	1060	1060	1060	1059	1059	1059	1058	1058	1057	1056	1051	1042	1042	1048	1053	1056	1056	1057	1057	1057	1057	1057	1057	1058	1056
8	1059	1056	1038	1029	1027	1039	1044	1050	1051	1053	1051	1051	1048	1048	1053	1060	1070	1078	1076	1068	1065	1058	1055	1056	1053
9	1057	1058	1058	1057	1052	1052	1054	1058	1059	1056	1048	1046	1049	1054	1060	1063	1062	1059	1058	1058	1059	1057	1055	1056	1056
10	1056	1056	1057	1056	1054	1053	1052	1052	1051	1048	1045	1042	1041	1044	1046	1050	1053	1052	1057	1065	1069	1068	1064	1060	1054
11 d	1050	1036	1033	1039	1045	1045	1044	1035	1039	1046	1050	1057	1066	1072	1078	1081	1085	1130	1115	1077	1048	1051	994	918	1051
12 d	967	992	998	973	1010	1038	1045	1044	1044	1051	1052	1053	1057	1062	1065	1071	1080	1081	1072	1069	1069	1066	1057	1041	*1044*
13	1036	1045	1051	1053	1055	1056	1057	1059	1062	1062	1061	1057	1060	1062	1062	1062	1063	1065	1065	1061	1063	1063	1062	1053	1058
14	1050	1048	1048	1051	1052	1051	1049	1052	1057	1052	1050	1048	1050	1054	1074	1086	1101	1081	1075	1072	1071	1066	1063	1051	1061
15	1032	1028	1036	1044	1046	1040	1041	1049	1058	1062	1063	1059	1060	1069	1075	1087	1096	1099	1097	1087	1080	1069	1065	1065	1063
16 d	1064	1064	1062	1034	1030	1041	1047	1054	1062	1065	1062	1057	1052	1062	1069	1079	1093	1088	1086	1077	1075	1064	1056	1052	1063
17 q	1062	1062	1061	1060	1059	1059	1059	1063	1061	1063	1057	1057	1058	1059	1065	1074	1072	1065	1064	1064	1064	1063	1061	1060	1062
18	1060	1059	1060	1060	1059	1059	1058	1058	1061	1059	1057	1062	1063	1065	1069	1072	1074	1071	1075	1076	1074	1070	1070	1066	1065
19	1063	1060	1050	1046	1051	1051	1053	1053	1052	1051	1049	1056	1062	1069	1077	1086	1100	1084	1078	1072	1070	1068	1066	1063	1064
20	1062	1062	1061	1060	1057	1056	1055	1058	1057	1060	1057	1059	1062	1063	1066	1068	1065	1063	1060	1060	1062	1068	1063	1059	1061
21 q	1057	1051	1051	1054	1055	1056	1057	1059	1065	1064	1061	1059	1059	1060	1063	1064	1061	1058	1056	1057	1057	1057	1058	1057	1058
22 d	1058	1058	1053	1052	1052	1053	1053	1054	1058	1059	1051	1052	1055	1058	1058	1065	1087	1171	1196	1141	1119	1075	1024	1032	*1072*
23	1054	1065	1069	1068	1066	1063	1064	1066	1070	1069	1063	1059	1058	1063	1074	1081	1077	1077	1088	1088	1083	1077	1063	1046	1069
24	1017	1044	1058	1060	1060	1060	1059	1058	1058	1061	1059	1058	1058	1063	1070	1081	1082	1081	1094	1104	1074	1065	1063	1052	1064
25	1040	1052	1057	1053	1046	1051	1056	1058	1058	1057	1055	1054	1052	1056	1058	1063	1063	1063	1064	1066	1065	1064	1063	1062	1057
26	1059	1059	1057	1058	1058	1058	1058	1059	1057	1054	1053	1052	1051	1053	1057	1060	1063	1063	1074	1082	1080	1069	1076	1053	1061
27	1053	1057	1062	1060	1060	1059	1059	1060	1061	1064	1063	1059	1058	1058	1062	1063	1063	1062	1060	1060	1062	1069	1069	1064	1061
28	1063	1061	1060	1059	1059	1059	1059	1058	1058	1054	1053	1053	1052	1055	1062	1063	1063	1064	1069	1071	1069	1069	1064	1059	1061
29	1045	1029	1045	1053	1053	1053	1053	1054	1054	1057	1054	1050	1053	1053	1057	1058	1057	1057	1058	1060	1068	1063	1059	1057	1054
30	1052	1051	1051	1051	1050	1051	1053	1054	1055	1052	1051	1053	1053	1057	1063	1067	1063	1063	1063	1065	1065	1063	1063	1057	1057
31 d	1045	1047	1045	1042	1014	998	994	1015	1035	1042	1044	1047	1051	1053	1055	1062	1075	1116	1173	1205	1161	1047	1010	992	1057
Mean	1050	1052	1053	1051	1051	1052	1053	1055	1057	1057	1054	1053	1054	1057	1062	1067	1071	1074	*1077*	1075	1071	1064	1057	*1050*	1059

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

141 ESKDALEMUIR — OCTOBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ			°A.
1	17 50	523	475	12 52	48	13 56 52·2	41·3 8 50	10·9	19 12	1065	1047	12 4	18	2,2,2,1,2,2,1,1	13	0 87·0
2	22 14	545	480	10 41	65	13 56 50·3	37·0 22 59	13·3	20 49	1080	1040	24 0	40	0,1,1,1,2,1,3,3	12	0 87·0
3	18 53	525	480	13 35	45	13 0 52·1	37·4 0 20	14·7	22 49	1065	1039	0 10	26	3,1,1,1,2,2,1,1	12	0 86·9
4 q	23 10	537	482	11 20	55	14 18 52·3	39·8 23 59	12·5	0 1	1063	1050	11 50	*13*	2,0,0,1,1,1,1,2	8	0 86·9
5	5 41) 18 49)	526	472	11 20	54	14 7 52·9	37·6 0 46	15·3	8 40	1064	1048	12 23	16	2,2,2,2,1,2,1,2	14	0 86·9
6 q	19 10	529	491	9 34	*38*	12 44 53·8	42·4 0 30	11·4	16 47	1066	1048	12 0	18	2,0,1,1,2,2,1,2	11	0 87·0
7 q	17 8	533	489	10 28	44	14 10 50·3	41·5 8 41	8·8	2 0	1062	1041	11 43	21	1,1,0,1,1,2,1,1	8	0 87·1
8	1 48	545	476	17 29	69	14 39 51·5	36·9 2 22	14·6	17 53	1082	1021	4 8	61	3,2,2,1,1,3,2,2	16	1 87·1
9	21 15	532	471	11 20	61	13 48 53·1	41·4 21 9	11·7	15 19	1063	1045	11 10	18	1,2,0,1,3,1,2,2	12	0 87·0
10	16 57	545	490	12 18	55	12 38 53·4	36·5 21 52	16·9	20 36	1072	1039	12 0	33	0,0,1,1,2,2,3,3	12	1 87·0
11 d	19 10	591	362	23 0	229	13 43 55·8	13·6 23 11	42·2	17 43	1156	*895*	23 26	261	3,2,3,2,3,4,5,6	28	2 86·9
12 d	0 44	529	437	2 45	92	3 28 54·0	21·9 0 1	32·1	16 45	1087	951	3 8	136	5,4,3,2,2,3,2,2	23	1 86·7
13	0 12	533	468	10 47	65	14 20 50·7	38·3 18 10	12·4	18 5	1069	1034	0 15	35	3,1,2,1,1,3,3,2	16	0 86·7
14	23 32	552	469	15 55	83	15 32 56·4	42·7 8 38	13·7	16 0	1105	1038	24 0	67	1,2,1,1,3,3,1,3	15	1 86·8
15	0 14	533	447	10 52	86	13 26 54·5	34·6 19 41	19·9	18 3	1101	1027	1 50	74	3,2,3,2,2,3,3,3	21	1 86·8
16 d	21 0	545	446	21 39	99	12 20 52·2	29·8 21 26	22·4	16 30	1097	1028	4 20	69	2,3,2,1,3,3,4,4	22	1 86·7
17 q	21 11	522	474	10 14	48	11 29 51·2	43·2 22 32	*8·0*	15 55	1075	1053	11 3	22	1,1,2,2,1,2,1,1	11	0 86·6
18	6 18	524	480	10 51	44	11 42) 12 28)	52·9 43·1 23 10	9·8	19 10	1079	1054	10 10	25	1,1,1,1,2,1,2,1	10	0 86·5
19	5 54	528	470	16 32	58	13 14 53·1	40·4 3 56	12·7	16 5	1105	1044	2 50	61	3,2,2,1,2,3,1,2	16	1 86·5
20	4 35	526	479	10 49	47	12 29 52·8	40·4 21 30	12·4	14 10	1069	1054	5 23	15	1,1,2,2,1,2,2,2	13	0 86·5
21 q	20 4	525	473	10 32	52	1 44 50·5	41·3 7 57	9·2	8 49	1069	1047	2 6	22	2,2,2,1,1,1,0,1	10	0 86·5
22 d	17 42	*621*	432	22 31	189	17 50 65·8	23·6 22 51	42·2	18 7	*1287*	979	22 32	*308*	2,1,1,2,3,5,6,5	25	2 86·5
23	18 31	530	450	10 46	80	13 34 54·1	29·3 18 26	24·8	18 23	1093	1023	24 0	70	2,2,2,2,2,2,3,3	18	1 86·4
24	19 48	595	460	15 20	135	12 26 53·0	22·4 19 46	30·6	19 43	1118	1010	0 28	108	3,2,2,1,2,3,5,3	21	1 86·4
25	4 18	532	474	11 26	58	13 22 50·6	23·3 9 2	27·3	19 57	1068	1035	0 4	33	2,2,1,1,1,1,1,0	9	0 86·3
26	20 49	556	469	10 42	87	11 59 52·9	33·4 21 52	19·5	19 17	1087	1046	23 38	41	1,1,2,2,2,2,4,3	17	1 86·4
27	19 33	521	474	10 39	47	12 22 50·6	36·3 0 1	14·3	21 59	1071	1051	0 1	20	2,1,2,2,2,1,1,2	11	0 86·3
28	18 35	536	491	11 27	45	14 31 50·9	38·8 23 37	12·1	20 4	1074	1051	12 15	23	1,1,2,2,2,2,3,2	15	0 86·3
29	22 32	535	484	0 34	51	13 48 50·5	39·9 20 39	10·6	20 45	1069	1026	1 25	43	3,2,1,2,2,1,2,2	15	0 86·2
30	5 38	533	489	11 45	44	12 37 52·4	39·9 22 38	12·5	15 10	1070	1048	4 38	22	2,2,2,2,2,2,2,2	16	0 86·2
31 d	4 17	584	*314*	6 17	*270*	19 14 *74·1*	*5·5* 21 2	*68·6*	19 39	1224	920	24 0	304	3,4,3,3,3,4,6,6	32	2 86·2
Mean	- -	542	463	- -	79	- - 53·6	34·6 - -	18·9	- -	1092	1027	- -	65	-	-	0·52 86·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

142 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	310	277	351	514	517	380	435	427	436	451	447	459	468	482	528	509	497	462	475	481	479	478	481	481	*451*
2	482	482	487	490	494	497	499	502	500	495	490	489	490	490	493	493	494	498	502	501	490	490	485	491	493
3	493	497	497	500	505	498	502	503	502	497	490	490	494	504	509	502	501	505	505	507	509	513	502	506	501
4 q	507	504	507	509	509	504	503	505	502	498	490	489	490	494	499	509	514	517	517	518	520	505	509	510	505
5	507	505	504	508	510	509	515	518	518	506	505	509	513	512	513	496	511	516	486	507	509	497	485	505	507
6 d	498	501	506	493	513	514	479	463	449	450	447	440	447	462	498	495	494	466	505	493	487	465	482	493	481
7	504	490	498	502	500	502	505	490	491	480	466	475	478	493	505	505	490	520	509	501	493	502	492	493	495
8	494	494	505	493	518	525	506	493	494	479	484	487	497	490	485	505	509	508	486	494	505	509	508	512	499
9	513	507	509	513	513	512	516	514	514	505	480	464	470	477	493	470	501	510	509	509	506	510	513	513	502
10 d	518	520	524	513	518	521	516	516	513	483	493	493	501	474	467	486	502	463	486	484	500	505	504	524	501
11	498	485	516	497	490	505	509	510	505	471	461	491	483	490	494	498	509	487	498	500	501	498	494	498	495
12	499	505	504	509	511	509	510	511	505	501	490	490	493	498	500	506	508	505	497	500	513	528	504	505	504
13	505	506	509	506	514	517	518	521	509	494	493	484	496	501	501	505	505	505	501	499	510	517	518	509	506
14	506	508	513	516	517	517	517	517	510	505	494	497	499	503	511	516	515	515	520	517	517	513	510	521	511
15 q	511	513	517	521	522	524	525	524	518	509	502	502	509	513	516	517	521	528	529	528	532	526	529	532	519
16 q	524	521	523	527	523	528	532	527	520	512	510	512	516	520	521	524	524	526	528	533	536	521	519	520	523
17 d	519	523	526	535	527	531	547	523	504	492	496	493	485	477	477	477	486	473	460	484	469	481	489	500	499
18	508	500	504	503	508	515	520	503	477	461	467	462	483	493	493	480	504	496	500	480	492	508	520	519	496
19	478	485	515	512	520	520	527	513	510	499	492	501	500	512	520	521	520	520	520	519	512	500	496	497	509
20	504	512	512	512	515	520	515	512	512	512	512	512	516	520	522	523	527	529	531	517	520	521	519	521	517
21	501	505	497	507	516	516	524	519	517	515	513	514	515	519	516	511	521	520	524	526	537	518	508	505	515
22	513	511	512	517	520	524	524	527	520	519	520	517	515	513	512	493	517	521	517	520	522	520	496	516	516
23	513	507	504	492	521	520	513	520	506	509	517	505	497	494	503	507	524	524	523	523	517	508	510	505	511
24 q	501	516	516	517	523	525	521	524	528	520	515	513	513	516	519	519	523	523	524	524	523	521	512	518	519
25	520	520	519	522	528	531	532	528	516	520	521	520	520	520	517	526	529	527	523	518	520	519	523	524	523
26 q	520	520	522	524	527	529	527	527	528	526	524	520	512	516	519	516	519	523	524	527	530	531	527	526	523
27	524	526	524	531	542	531	539	547	539	535	531	532	531	519	525	531	532	536	536	535	534	531	533	519	*532*
28 d	509	504	472	503	519	539	483	454	434	449	461	496	495	496	497	501	512	509	527	449	471	492	487	496	490
29	484	484	485	488	492	492	497	499	484	496	493	491	493	504	509	516	519	519	520	516	512	512	509	512	501
30	505	512	511	512	511	511	512	508	508	504	509	515	516	516	520	519	515	520	523	522	515	512	516	511	513
Mean	499	498	503	509	*515*	512	512	508	502	496	*494*	495	498	501	506	506	511	509	510	508	509	508	506	509	505

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

143 ESKDALEMUIR (D) — 12° + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	10·3	21·4	25·7	29·9	52·6	53·8	57·5	55·3	47·0	46·0	46·1	46·2	49·4	51·2	43·2	51·5	56·9	49·2	47·5	44·5	43·8	44·2	44·1	44·1	44·2
2	44·0	44·0	44·2	44·2	44·3	44·3	44·2	44·1	43·1	42·3	43·4	45·7	46·0	46·3	46·0	44·9	44·3	45·0	44·9	44·9	40·5	39·5	39·4	38·6	43·7
3	41·2	43·5	44·8	44·9	44·3	43·3	44·0	44·0	43·3	43·4	44·7	46·8	50·5	50·4	49·7	48·8	47·0	45·9	45·1	44·1	44·2	43·9	41·5	42·6	45·1
4 q	44·3	42·4	41·4	41·2	41·6	42·3	42·5	43·2	43·3	43·3	44·7	46·8	47·9	47·7	46·9	46·9	45·9	45·9	45·4	45·2	46·0	46·3	45·2	45·0	44·6
5	43·1	42·9	43·5	45·0	44·1	44·0	43·7	43·7	43·7	43·9	45·6	47·0	47·8	47·8	48·4	47·9	47·9	39·4	46·1	46·7	38·3	33·7	38·1	44·0	44·0
6 d	46·4	47·9	45·5	46·8	47·8	51·3	52·1	52·2	49·4	52·3	50·4	52·1	52·5	52·7	46·9	52·7	39·3	39·7	37·2	34·9	38·8	39·6	40·6	38·1	*46·1*
7	47·6	46·8	44·0	45·1	45·1	45·5	45·9	44·1	44·8	44·9	45·9	48·6	49·5	49·3	48·6	47·4	40·3	34·1	37·2	38·8	40·5	41·5	39·8	40·5	44·0
8	43·3	43·4	43·1	48·2	46·7	46·0	46·2	45·0	44·3	44·4	44·8	46·0	47·9	47·8	42·6	46·1	46·3	45·4	32·5	42·5	44·2	43·7	43·2	42·3	44·4
9	44·4	43·2	44·2	44·9	45·1	45·1	45·1	44·3	43·3	44·2	46·1	47·8	51·2	51·4	47·7	47·0	50·3	47·2	46·1	45·1	42·6	43·6	44·3	44·1	45·8
10 d	44·5	42·2	42·4	39·9	42·4	43·1	44·3	44·9	44·2	44·2	45·7	46·7	49·4	51·8	52·4	50·5	49·3	44·0	44·4	42·6	43·2	41·7	42·2	39·2	44·8
11	27·1	29·8	39·8	39·6	43·7	44·3	44·4	44·2	44·1	45·8	47·3	48·5	50·4	49·5	48·5	46·3	46·1	41·1	39·1	45·5	41·1	42·7	39·9	39·7	*42·9*
12	42·3	43·4	44·5	45·1	45·1	45·9	46·8	45·8	43·4	43·5	44·3	46·8	47·6	47·2	46·9	46·7	45·3	45·9	44·2	43·3	43·4	37·1	39·8	41·4	44·4
13	43·1	44·3	44·8	45·0	45·3	45·1	45·0	44·9	44·0	44·9	46·9	48·6	49·6	50·0	49·4	47·9	47·8	44·6	45·8	44·9	44·3	44·1	43·5	40·6	45·6
14	42·3	42·5	44·2	44·9	44·7	44·9	45·1	44·9	43·3	44·2	45·0	46·9	47·8	48·5	47·8	46·8	46·2	45·9	44·0	45·1	44·5	43·1	42·3	42·0	44·9
15 q	43·7	44·2	44·8	44·9	44·9	44·5	44·2	44·0	43·3	43·7	45·7	47·7	47·8	48·5	46·9	46·6	46·8	46·0	45·7	44·9	44·9	44·1	44·1	44·2	45·3
16 q	44·2	45·0	44·7	43·1	43·6	44·8	44·1	43·3	43·9	44·1	46·3	47·9	48·5	47·8	46·8	46·3	46·8	46·5	46·0	45·9	45·9	42·6	40·5	42·3	45·0
17 d	43·4	44·0	40·4	44·0	44·2	45·0	48·3	45·9	44·4	46·2	47·1	49·7	50·3	53·3	51·7	42·2	53·0	45·6	33·3	41·1	30·4	30·3	41·2	42·3	44·1
18	44·8	44·4	44·5	44·9	45·1	43·8	43·1	44·2	43·4	43·0	46·2	48·5	49·5	50·4	50·3	48·5	43·0	49·3	45·7	40·2	41·4	44·0	44·1	40·4	45·1
19	36·9	50·9	43·9	41·4	43·0	43·9	43·8	43·3	43·3	44·0	45·9	48·9	49·1	47·2	47·1	46·7	45·9	45·9	45·9	44·9	43·9	43·2	38·8	40·6	44·5
20	44·9	45·4	45·7	45·2	44·7	44·5	44·6	44·4	44·1	44·9	46·8	47·9	48·5	48·0	47·0	46·8	46·8	46·9	47·1	46·0	41·8	44·2	43·0	41·7	45·5
21	39·9	39·1	41·6	45·9	43·8	43·2	43·2	43·3	43·5	44·4	45·2	46·7	46·9	47·7	48·9	46·7	46·7	46·0	46·2	43·9	43·9	40·3	39·5	39·6	44·0
22	44·9	43·1	42·7	44·0	44·9	44·8	44·2	44·2	44·3	44·9	45·7	46·0	47·3	48·3	48·7	45·8	44·2	49·3	48·7	46·4	37·9	36·9	37·0	40·4	44·4
23	37·9	37·8	37·8	39·7	44·1	44·2	44·3	44·3	44·4	43·2	44·1	47·0	47·6	46·8	47·6	45·8	46·7	46·7	45·7	45·2	44·3	41·4	37·4	38·9	43·5
24 q	41·1	43·4	44·2	44·2	44·9	44·8	44·3	44·7	44·9	44·2	44·2	45·1	45·8	46·3	46·6	46·1	45·9	45·9	45·9	46·0	44·6	41·1	43·1	43·3	44·6
25	43·3	43·2	44·1	44·4	44·4	44·2	44·6	45·0	44·0	44·2	44·9	45·9	45·8	46·0	45·1	45·3	45·9	45·9	45·6	43·2	39·3	42·7	42·8	43·4	44·3
26 q	43·4	44·1	44·1	44·0	44·8	44·3	44·8	44·9	44·8	45·0	45·9	46·0	46·7	46·1	46·1	46·2	46·0	45·9	45·0	44·8	44·9	44·3	44·2	44·1	45·0
27	44·2	44·2	44·2	44·9	44·2	44·1	48·5	45·9	45·2	46·1	46·9	48·9	50·1	49·2	47·5	46·7	45·8	46·7	46·0	45·1	44·5	43·3	42·5	44·0	45·8
28 d	43·8	44·1	35·7	30·2	27·8	37·2	50·9	52·4	46·1	48·0	47·8	43·4	45·1	45·2	45·3	44·2	46·1	50·7	36·8	41·2	45·2	41·4	43·4	44·0	43·2
29	42·5	42·0	41·6	41·5	41·5	43·1	43·0	44·7	47·4	46·9	47·8	47·8	49·4	48·6	47·6	46·2	46·0	45·0	45·0	44·4	43·4	43·4	43·2	43·2	44·8
30	41·6	42·1	43·3	43·1	43·3	43·9	43·8	43·3	43·3	44·0	45·7	46·9	47·0	46·7	45·9	46·9	47·5	46·7	47·3	46·3	41·7	43·4	42·3	42·9	44·5
Mean	*41·5*	42·5	42·5	43·0	44·1	44·6	45·5	45·3	44·4	44·8	45·9	47·3	48·4	*48·6*	47·5	46·9	46·5	45·4	43·9	43·9	42·5	41·7	41·7	41·9	44·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

144 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — NOVEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	902	841	864	874	853	908	945	1003	1045	1067	1079	1105	1121	1142	1067	1178	1212	1171	1111	1092	1085	1082	1080	1079	*1038*
2	1079	1079	1076	1075	1074	1073	1070	1067	1073	1075	1076	1076	1078	1078	1079	1078	1075	1073	1072	1072	1076	1068	1069	1067	1074
3	1067	1067	1069	1072	1069	1069	1068	1067	1071	1069	1068	1068	1067	1070	1074	1075	1070	1070	1070	1069	1069	1070	1074	1074	1070
4 q	1073	1073	1069	1067	1066	1065	1063	1063	1065	1070	1069	1069	1067	1067	1071	1071	1069	1068	1067	1067	1067	1074	1076	1074	1069
5	1074	1074	1072	1069	1068	1067	1064	1060	1061	1062	1058	1058	1062	1066	1070	1080	1081	1089	1091	1080	1085	1078	1072	1066	1071
6 d	1057	1054	1061	1058	1049	1045	1048	1051	1056	1057	1067	1091	1111	1124	1111	1100	1121	1121	1108	1091	1079	1039	1024	1029	1073
7	1021	1025	1047	1058	1061	1063	1064	1067	1071	1073	1074	1073	1069	1071	1073	1074	1085	1084	1075	1073	1075	1073	1072	1061	1066
8	1056	1059	1051	1041	1035	1046	1054	1056	1059	1064	1069	1068	1069	1082	1095	1084	1079	1076	1091	1081	1073	1069	1069	1068	1066
9	1061	1061	1062	1063	1063	1064	1064	1066	1066	1064	1065	1068	1073	1088	1097	1105	1091	1077	1075	1074	1073	1073	1069	1068	1072
10 d	1067	1055	1051	1049	1050	1051	1052	1057	1061	1067	1067	1065	1068	1086	1102	1092	1083	1111	1117	1114	1093	1084	1075	1056	1074
11	1032	1025	1009	1004	1025	1049	1058	1063	1064	1067	1068	1068	1069	1069	1074	1075	1075	1084	1087	1080	1076	1074	1069	1073	1060
12	1073	1069	1069	1068	1068	1067	1065	1066	1068	1069	1069	1069	1070	1073	1075	1074	1074	1074	1079	1080	1073	1054	1054	1057	1069
13	1061	1061	1062	1063	1063	1064	1066	1067	1070	1068	1063	1068	1072	1074	1076	1076	1079	1080	1081	1085	1080	1074	1068	1067	1070
14	1063	1063	1063	1063	1063	1063	1063	1063	1064	1063	1062	1063	1063	1067	1068	1070	1073	1072	1073	1072	1071	1069	1068	1061	1066
15 q	1061	1062	1062	1063	1063	1063	1063	1062	1063	1065	1061	1061	1063	1067	1068	1068	1067	1064	1063	1064	1064	1065	1063	1059	1063
16 q	1058	1061	1058	1058	1060	1057	1056	1058	1061	1061	1060	1063	1066	1067	1067	1066	1063	1062	1062	1061	1061	1069	1073	1072	1063
17 d	1069	1069	1069	1064	1061	1054	1041	1043	1050	1061	1067	1074	1085	1098	1116	1145	1151	1154	1151	1141	1103	1091	1073	1066	*1087*
18	1051	1051	1052	1057	1061	1062	1061	1064	1068	1074	1073	1079	1085	1087	1093	1106	1112	1109	1123	1139	1109	1076	1058	1053	1079
19	1051	1004	1019	1046	1051	1056	1056	1061	1062	1063	1063	1063	1067	1068	1069	1069	1067	1065	1063	1066	1073	1087	1091	1081	1061
20	1072	1067	1069	1069	1068	1066	1065	1064	1062	1063	1063	1064	1067	1070	1070	1070	1067	1066	1065	1069	1073	1068	1068	1068	1067
21	1069	1073	1074	1067	1066	1067	1066	1064	1063	1062	1061	1062	1066	1067	1070	1073	1070	1068	1067	1067	1063	1067	1068	1067	1067
22	1062	1066	1067	1066	1064	1062	1062	1061	1058	1055	1052	1056	1058	1061	1067	1079	1081	1074	1075	1075	1081	1063	1067	1067	1066
23	1062	1058	1048	1032	1038	1043	1051	1055	1058	1062	1057	1058	1064	1066	1068	1075	1073	1068	1067	1067	1068	1074	1076	1070	1061
24 q	1068	1064	1064	1064	1063	1062	1062	1058	1057	1058	1060	1057	1055	1057	1062	1064	1063	1063	1063	1064	1066	1069	1068	1067	1062
25	1063	1063	1061	1062	1061	1061	1061	1058	1061	1057	1056	1056	1056	1056	1058	1061	1061	1062	1063	1067	1067	1062	1061	1058	1061
26 q	1058	1057	1057	1057	1057	1057	1057	1057	1056	1056	1057	1057	1060	1061	1063	1064	1064	1064	1063	1063	1062	1062	1062	1061	1060
27	1061	1060	1058	1056	1055	1055	1050	1045	1046	1049	1051	1052	1054	1057	1060	1058	1058	1056	1056	1058	1061	1063	1063	1064	1056
28 d	1068	1075	1091	1069	1021	982	984	1000	1031	1044	1055	1068	1073	1075	1074	1073	1072	1085	1147	1128	1131	1109	1096	1090	1068
29	1086	1086	1081	1075	1069	1073	1074	1069	1070	1072	1073	1074	1074	1075	1075	1075	1074	1073	1070	1070	1073	1074	1075	1074	1074
30	1074	1072	1073	1069	1068	1068	1067	1067	1067	1064	1062	1062	1066	1067	1069	1073	1070	1070	1070	1074	1081	1081	1079	1080	1071
Mean	1057	1053	1054	1053	*1051*	1053	1054	1057	1061	1063	1064	1067	1071	1075	1076	1082	*1083*	1082	1082	1080	1077	1072	1069	1067	1067

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

145 ESKDALEMUIR — NOVEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	14 30	603	*177*	1 25	*426*	6 30 / 16 30	*67·1*	*1·8*	0 22	*65·3*	16 22	*1245*	*794*	2 7	*451*	7,6,5,3,5,5,2,1	34	2	86·2
2	21 2	515	481	0 1	34	13 40	46·6	37·4	21 53	9·2	20 50	1080	1066	24 0	14	1,1,1,1,0,2,2,3	11	0	86·1
3	14 58	518	478	0 10	40	12 49	51·9	38·7	0 1	13·2	15 0	1076	1065	0 1	*11*	2,1,1,1,2,2,1,2	12	0	86·1
4 q	20 0 / 20 23	524	485	11 17	39	12 40	49·0	39·5	3 0	9·5	22 15	1079	1062	7 20	17	2,2,1,1,1,1,1,2	11	0	86·0
5	17 21	543	462	18 20	81	16 30	49·7	28·7	20 56	21·0	18 22	1097	1056	10 37	41	1,1,1,1,2,3,4,4	17	1	86·0
6 d	18 10	595	404	22 11	191	12 59	58·4	10·9	18 3	47·5	18 3	1158	1000	22 4	158	3,3,3,3,4,4,5,5	30	2	85·9
7	18 53	544	459	13 0	85	0 23	51·3	30·7	17 10	20·6	16 47	1091	1008	0 55	83	3,1,2,2,3,4,3,3	21	1	85·9
8	5 11	532	463	18 8	69	3 26	50·2	28·9	18 28	21·3	14 30	1097	1031	4 20	66	3,3,3,2,3,3,4,2	23	1	85·9
9	0 38	521	443	15 23	78	13 22	53·3	40·2	20 54	13·1	15 32	1110	1057	0 50	53	2,1,1,3,3,4,2,2	18	1	85·8
10 d	23 59	547	443	13 59	104	14 8	55·6	26·2	24 0	29·4	17 50	1122	1045	3 2	77	3,2,2,2,4,4,3,4	24	1	85·8
11	0 2	545	447	10 15	98	11 40	52·1	23·6	0 50	28·5	18 6	1092	1003	3 46	89	4,3,2,3,2,3,4,2	23	1	85·8
12	21 19	551	485	11 30	66	12 53	48·7	34·4	21 37	14·3	19 44	1084	1050	21 50	34	1,2,2,1,1,2,3,3	15	0	85·8
13	22 58	526	476	11 34	50	13 44	51·2	40·3	23 55	10·9	19 24	1085	1059	0 1	26	1,1,2,2,1,2,2,2	13	0	85·8
14	23 11	537	489	10 29	48	13 29	49·0	38·2	23 9	10·8	18 10	1074	1056	23 57	18	1,1,1,1,1,1,1,2	9	0	85·8
15 q	22 54	545	501	10 44	44	13 15	48·7	42·4	0 9	6·3	15 0	1068	1057	0 1	*11*	1,0,0,0,1,1,0,2	5	0	85·8
16 q	20 31	540	505	22 42	35	12 20	48·9	39·5	22 11	9·4	23 0	1074	1056	6 10	18	1,1,1,1,1,1,1,2	9	0	85·8
17 d	6 1	558	444	15 1	114	13 55	57·5	18·2	20 55	39·3	17 3	1181	1038	6 50	143	3,2,4,3,3,4,5,5	29	1	85·7
18	22 35	541	452	11 37	89	17 58	53·5	35·7	24 0	17·8	19 17	1146	1049	2 8	97	2,2,3,2,3,4,4,3	23	1	85·5
19	1 52	539	440	1 9	99	1 22	55·4	35·1	0 43	20·3	22 26	1094	989	1 40	105	4,2,2,2,3,2,2,3	20	1	85·5
20	18 2	535	496	10 20	39	13 30	49·4	40·3	20 18	9·1	20 1	1075	1061	8 20	14	2,1,2,2,1,1,2,2	13	0	85·3
21	20 22	548	484	2 50	64	14 30	50·3	35·9	22 27	14·4	2 5	1075	1061	16 50	14	3,3,2,1,2,2,2,3	18	1	85·3
22	21 3	586	466	21 48	120	17 47	49·7	27·0	20 59	22·7	16 5	1085	1051	10 30	34	2,1,2,1,2,3,4,5	20	1	85·2
23	5 5	543	470	3 31	73	12 45	49·4	33·9	1 41	15·5	22 6	1081	1027	3 23	54	3,4,2,2,2,3,1,3	20	1	85·1
24 q	8 20	531	493	0 31	38	14 30	46·7	37·0	21 7	9·7	21 22	1073	1055	12 35	18	2,1,1,1,0,1,3,3	12	0	85·1
25	7 15	536	509	19 35	27	16 40	46·8	36·0	19 53	10·8	20 2	1069	1055	12 57	14	1,1,2,1,1,1,3,2	12	0	85·1
26 q	21 10	532	507	12 29	*25*	12 58	47·7	42·5	3 22	*5·2*	15 38	1066	1055	3 0	*11*	1,1,2,1,2,0,0,0	7	0	85·0
27	7 17	555	508	24 0	47	12 42	52·9	41·3	22 45	11·6	24 0	1067	1044	7 18	23	0,2,3,2,2,2,1,3	15	1	84·9
28 d	18 42	*646*	406	19 27	240	6 52	66·4	18·8	18 41	47·6	18 39	1174	959	5 53	215	4,4,5,4,2,3,6,4	32	2	84.9
29	15 57	523	478	8 22	45	14 0	50·1	39·6	1 45	10·5	0 3	1087	1069	8 52	18	2,1,2,2,2,1,1,1	12	0	84·9
30	18 0	531	503	0 28	28	18 19	48·5	39·5	20 49	9·0	20 30	1082	1061	11 0	21	1,0,0,2,1,2,3,2	11	0	84·9
Mean	- -	546	462	- -	85	- -	51·9	32·7	- -	19·1	- -	1100	1035	- -	65	-	-	0·63	85·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

146 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	509	504	521	512	512	512	513	520	510	535	513	504	520	520	683	645	543	434	443	414	435	402	444	426	503
2 d	459	452	464	424	487	440	459	467	475	475	477	483	479	495	490	502	501	493	495	495	498	502	499	499	*480*
3	498	498	500	494	499	502	502	502	502	498	495	491	494	495	499	512	521	517	506	513	502	522	501	495	502
4	499	491	501	526	521	518	518	511	510	509	489	480	484	487	503	502	509	497	489	487	506	494	498	498	501
5	498	499	500	502	499	507	509	503	501	513	511	510	509	506	500	514	513	513	503	509	497	495	502	499	505
6	506	507	509	510	508	513	511	513	503	501	499	509	507	510	511	500	491	502	506	509	510	522	507	509	507
7	506	509	506	512	513	523	525	526	521	502	498	498	506	509	505	503	506	506	506	502	509	514	518	507	510
8	509	505	509	510	513	518	521	521	518	517	511	507	507	511	509	507	510	506	509	514	510	495	527	506	511
9	513	511	515	521	519	525	527	526	523	513	510	502	484	487	509	506	514	517	518	517	507	502	507	542	513
10	510	510	513	514	512	518	525	518	518	513	510	510	509	507	510	500	505	513	518	518	516	513	511	515	513
11 q	516	516	518	521	525	525	525	521	518	513	510	511	515	514	516	517	518	522	523	522	521	521	521	521	519
12 q	521	521	523	525	529	530	529	522	521	520	518	519	518	516	518	508	511	511	517	517	518	518	518	521	520
13	533	520	521	526	529	530	530	533	539	540	537	528	522	512	509	514	500	480	472	478	493	502	505	506	515
14 d	533	500	494	508	515	518	512	502	500	482	468	501	495	500	464	492	489	496	497	507	511	483	493	500	498
15	499	503	507	511	523	508	512	507	504	503	503	506	509	506	501	510	514	514	514	514	511	523	515	508	509
16 d	508	506	516	536	487	518	517	518	515	509	511	514	515	515	518	515	515	514	515	515	514	515	515	523	514
17	522	512	512	511	511	523	529	525	515	511	507	513	515	521	521	520	515	514	499	502	504	515	542	506	515
18	509	512	512	503	514	516	529	534	514	503	504	507	511	515	524	527	522	523	521	522	519	512	507	511	515
19	518	511	511	512	515	518	522	527	515	507	496	500	511	512	511	513	519	515	511	511	506	511	508	512	512
20 q	512	509	519	516	518	522	523	523	523	520	512	511	512	518	515	507	522	519	518	519	518	518	516	519	517
21 q	516	518	516	518	520	522	519	520	522	520	519	521	523	526	525	525	526	527	523	522	523	520	532	535	*522*
22	520	519	519	519	522	527	529	528	527	523	522	523	523	523	523	522	512	510	510	515	518	518	516	522	520
23	521	518	519	521	534	532	530	530	530	527	528	534	530	527	523	518	496	506	518	520	512	508	496	542	522
24	507	512	514	520	522	525	527	523	522	508	508	507	505	517	512	506	508	504	515	514	515	526	515	511	514
25 q	512	514	516	520	523	523	527	531	530	522	522	523	525	523	523	519	519	521	523	527	523	519	518	514	522
26	515	518	519	518	518	526	527	523	518	520	522	524	523	525	515	523	523	515	522	523	519	515	542	496	520
27 d	502	521	501	500	514	530	524	518	515	513	511	514	503	511	519	515	514	519	509	511	519	513	510	535	514
28	500	503	510	518	518	518	521	518	520	520	519	519	519	520	517	511	518	520	523	527	520	515	514	514	517
29	520	504	508	511	514	515	518	519	512	518	524	523	515	515	518	520	508	510	518	522	519	511	514	509	515
30	511	511	515	512	516	519	519	522	520	522	518	512	507	514	523	519	522	505	506	516	516	507	503	507	514
31	512	512	511	516	518	518	522	519	519	515	512	508	509	512	517	518	504	510	522	521	523	519	519	518	516
Mean	510	*508*	510	512	515	517	*519*	518	515	513	509	510	510	512	517	517	513	508	509	510	510	508	511	511	512

518 at 0-1h. January 1, 1942.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

147 ESKDALEMUIR (D) — 12° + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	42·6	43·3	39·6	41·2	42·1	43·9	44·2	41·3	46·6	45·9	42·3	46·8	49·3	52·8	50·0	52·0	42·5	35·5	40·7	29·9	34·9	36·0	32·8	43·2	*42·5*
2 d	39·3	38·7	38·9	42·3	50·3	44·7	39·6	41·4	41·4	43·1	43·5	45·9	46·8	46·9	48·8	47·9	47·0	40·4	43·1	44·2	44·3	43·4	43·7	44·2	43·7
3	44·0	44·1	44·2	44·9	43·3	43·1	43·1	43·1	43·1	43·4	44·2	44·9	45·2	46·0	46·1	46·4	46·3	48·9	48·5	45·3	39·6	35·3	39·8	39·4	43·8
4	40·3	39·8	43·8	43·4	44·1	44·0	44·4	44·9	45·8	47·1	47·4	47·6	47·6	47·9	48·4	48·5	47·4	47·7	48·0	43·4	43·2	38·8	42·6	43·0	45·0
5	43·1	43·3	43·2	43·2	44·4	44·2	42·4	42·4	43·9	44·0	45·2	45·9	46·4	47·4	46·7	46·7	48·8	51·1	49·5	44·3	43·3	43·3	38·4	38·9	44·6
6	45·1	43·8	43·3	43·3	46·5	46·2	44·1	44·2	43·4	43·6	44·0	44·7	45·9	46·5	47·1	47·0	42·4	43·8	44·6	43·3	42·6	43·5	41·6	42·6	44·3
7	43·1	44·0	44·4	45·9	44·9	44·5	44·2	44·1	44·1	45·1	45·2	47·6	47·7	47·8	46·6	46·0	45·1	44·4	44·0	42·6	42·9	41·3	41·1	38·9	44·4
8	42·0	43·6	43·1	44·2	44·9	44·1	44·1	44·0	44·0	43·9	45·7	46·1	46·9	47·8	46·9	45·6	45·7	47·3	45·6	44·3	43·4	42·2	40·6	39·5	44·4
9	42·9	43·2	44·1	44·2	44·4	44·3	44·0	44·3	43·9	43·5	45·1	45·4	48·7	48·5	48·6	47·0	44·9	44·9	44·5	44·0	43·5	42·2	41·3	41·4	44·5
10	42·1	42·1	43·4	43·2	43·9	43·4	43·5	43·5	43·5	43·3	45·1	46·1	46·6	46·9	46·5	47·1	47·5	44·9	44·1	44·0	43·4	43·1	41·6	42·4	44·2
11 q	43·3	43·9	44·2	45·1	44·1	43·4	43·7	43·9	43·9	44·2	45·8	47·0	47·6	47·3	46·7	45·8	45·1	44·2	44·0	44·0	43·7	43·5	43·4	43·5	44·6
12 q	43·5	43·9	44·2	44·6	44·7	43·3	43·6	43·3	43·3	44·6	46·1	47·6	47·5	46·6	47·6	46·9	46·1	45·2	43·2	44·0	43·2	43·2	43·0	43·5	44·7
13	43·2	43·1	44·0	44·2	44·9	44·9	44·9	44·9	45·1	45·8	46·7	47·4	49·1	49·8	50·3	51·1	52·4	53·1	42·4	38·7	41·3	39·3	40·7	41·8	*45·4*
14 d	36·2	37·0	44·3	51·2	43·3	44·0	44·8	45·9	46·7	47·1	49·5	48·7	49·3	47·6	47·4	43·9	46·1	44·0	42·4	35·8	37·1	29·0	37·5	42·3	43·4
15	43·4	46·1	46·0	45·1	43·6	44·1	44·9	44·1	43·9	44·0	44·8	45·8	46·0	46·3	46·0	45·1	44·9	44·3	44·2	44·0	43·1	38·7	39·8	43·1	44·2
16 d	44·0	43·0	43·0	39·1	39·7	39·3	40·4	43·1	43·2	43·9	45·8	46·1	46·9	47·6	46·9	47·6	46·3	45·5	44·4	44·0	43·1	42·4	42·6	42·7	43·8
17	43·7	43·5	42·4	41·8	44·0	42·5	42·3	43·0	46·0	44·7	45·1	44·6	46·0	46·9	47·6	47·5	48·4	45·8	46·9	44·4	40·7	38·9	37·1	41·3	44·0
18	43·3	43·7	44·0	44·9	44·1	44·9	46·0	44·0	45·9	44·1	43·5	46·5	45·8	47·5	47·6	49·3	47·7	47·2	45·1	44·5	43·3	42·1	42·2	42·4	45·0
19	42·2	43·1	44·1	44·2	44·2	44·1	43·9	43·8	43·9	43·7	45·3	47·7	48·5	47·4	46·7	45·8	45·7	46·1	44·3	44·5	44·4	42·0	40·9	42·3	44·5
20 q	42·6	43·5	43·7	44·2	44·3	43·9	44·1	43·9	43·4	43·3	44·1	44·9	45·7	46·7	46·9	46·6	46·3	45·3	44·9	44·0	43·2	42·4	42·4	42·6	44·3
21 q	43·1	44·0	44·1	44·8	44·8	44·2	44·1	43·3	43·3	43·1	44·1	45·0	45·5	46·0	46·1	45·3	45·3	45·2	44·8	44·0	43·8	42·4	40·4	43·0	44·2
22	43·3	43·4	43·2	44·1	44·9	44·9	44·4	44·1	43·9	43·5	44·2	45·2	46·2	46·6	46·1	46·1	45·2	44·9	45·1	44·3	43·3	42·6	43·1	43·1	44·4
23	41·4	43·5	44·3	45·9	43·2	43·1	44·0	44·3	44·1	44·9	45·1	46·0	47·2	47·9	47·8	48·5	48·6	47·5	45·9	44·2	42·4	39·4	40·4	37·6	44·5
24	40·2	43·3	43·3	44·2	44·5	44·1	44·8	44·2	44·2	46·0	48·8	48·1	49·2	49·8	48·8	47·0	46·0	43·9	44·3	44·1	39·8	42·8	41·3	41·5	44·8
25 q	43·3	43·3	43·2	43·4	44·0	44·2	44·6	44·0	43·9	44·0	45·1	46·7	47·9	46·3	45·4	45·0	45·8	45·1	44·8	44·3	44·1	43·8	43·7	43·3	44·5
26	43·1	43·3	43·4	43·2	42·7	44·1	42·6	43·4	43·6	44·5	45·0	45·2	46·7	47·5	45·9	45·1	47·0	45·2	45·9	44·9	44·5	43·4	39·9	39·5	44·1
27 d	36·0	34·1	32·4	37·8	40·7	41·5	43·3	43·6	43·6	44·0	44·3	47·3	46·8	47·6	47·1	46·3	46·9	46·7	47·5	46·1	43·7	42·7	42·1	33·6	42·7
28	38·8	41·4	43·5	39·9	39·2	41·5	43·0	43·5	43·3	43·6	44·3	45·4	45·9	46·1	47·2	46·9	45·8	45·9	45·8	44·3	43·6	43·7	41·3	42·2	43·6
29	33·6	40·3	41·6	43·1	43·3	43·0	43·3	43·0	44·1	43·2	43·4	44·7	46·3	46·1	46·7	47·1	47·4	44·1	45·0	43·5	43·3	35·2	39·8	41·3	43·0
30	42·4	43·1	44·3	43·9	44·0	44·0	43·4	43·2	43·1	43·6	44·0	46·0	46·2	46·6	47·1	46·8	47·8	48·5	46·5	45·6	44·1	43·0	42·3	43·1	44·7
31	40·2	42·2	44·1	45·2	44·5	44·0	44·0	43·5	43·4	43·3	44·1	45·3	46·1	46·3	46·7	46·4	46·3	47·7	45·0	44·8	41·5	43·1	43·2	43·4	44·3
Mean	41·8	42·5	43·1	43·7	43·9	43·7	43·7	43·7	44·1	44·3	45·1	46·2	47·0	*47·4*	47·2	46·9	46·4	45·6	45·0	43·3	42·5	41·1	*41·0*	41·6	44·2

44·2 at 0-1h. January 1, 1942.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

148 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — DECEMBER 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1079	1080	1076	1068	1065	1063	1056	1050	1045	1036	1050	1067	1075	1097	1242	1379	1355	1252	1206	1150	1108	1019	1024	977	*1109*
2 d	965	1005	1019	1019	1000	1003	1040	1056	1061	1067	1073	1073	1074	1084	1085	1086	1087	1097	1093	1091	1086	1082	1080	1078	1059
3	1075	1075	1075	1074	1073	1073	1070	1069	1069	1073	1073	1073	1072	1074	1075	1074	1072	1073	1079	1080	1088	1087	1080	1079	1075
4	1069	1069	1072	1055	1055	1057	1060	1061	1061	1060	1063	1067	1074	1079	1081	1079	1082	1085	1094	1104	1098	1085	1082	1079	1074
5	1076	1075	1074	1072	1069	1065	1064	1062	1059	1058	1058	1059	1062	1066	1070	1073	1073	1074	1091	1102	1086	1088	1093	1090	1073
6	1076	1075	1073	1069	1068	1066	1067	1064	1067	1068	1068	1068	1067	1067	1070	1076	1082	1080	1076	1074	1073	1065	1063	1064	1070
7	1066	1064	1064	1064	1066	1066	1063	1062	1062	1063	1062	1058	1061	1067	1069	1073	1073	1073	1073	1075	1075	1072	1067	1063	1067
8	1062	1062	1064	1064	1064	1063	1062	1062	1062	1058	1056	1056	1056	1061	1067	1073	1073	1075	1076	1074	1074	1075	1066	1061	1065
9	1061	1062	1062	1062	1063	1062	1061	1060	1060	1059	1059	1062	1066	1067	1070	1072	1069	1069	1068	1068	1070	1073	1069	1046	1064
10	1052	1057	1060	1058	1061	1061	1061	1062	1062	1062	1058	1058	1060	1064	1066	1075	1074	1074	1071	1068	1067	1067	1067	1065	1064
11 q	1062	1062	1062	1061	1061	1061	1061	1061	1061	1061	1058	1061	1061	1063	1064	1066	1066	1064	1064	1063	1063	1063	1062	1062	1062
12 q	1062	1062	1061	1060	1058	1058	1060	1060	1060	1058	1055	1056	1058	1063	1065	1068	1069	1069	1070	1068	1067	1066	1064	1061	1062
13	1054	1055	1056	1056	1056	1056	1056	1055	1054	1050	1049	1049	1054	1056	1062	1067	1077	1105	1146	1121	1093	1083	1073	1063	1069
14 d	1043	1037	1038	1013	1031	1046	1054	1057	1058	1064	1068	1068	1069	1079	1093	1093	1085	1085	1086	1087	1064	1062	1062	1062	1063
15	1062	1061	1056	1056	1055	1057	1058	1061	1063	1066	1067	1067	1068	1071	1070	1068	1067	1066	1066	1066	1067	1067	1063	1063	1064
16 d	1063	1061	1040	1025	1020	1026	1043	1049	1053	1056	1054	1056	1056	1057	1061	1063	1062	1062	1062	1063	1063	1067	1067	1061	*1054*
17	1055	1055	1057	1059	1061	1057	1054	1050	1050	1055	1056	1061	1061	1059	1062	1064	1068	1075	1084	1084	1084	1079	1063	1052	1063
18	1057	1059	1058	1060	1060	1056	1053	1047	1049	1056	1062	1063	1065	1064	1064	1062	1061	1063	1067	1067	1067	1069	1073	1068	1061
19	1062	1063	1062	1062	1061	1060	1057	1057	1060	1061	1061	1063	1065	1067	1068	1070	1067	1067	1068	1069	1072	1073	1073	1069	1065
20 q	1068	1067	1062	1062	1062	1062	1061	1058	1056	1055	1057	1057	1056	1058	1063	1069	1068	1067	1066	1064	1063	1064	1063	1062	1062
21 q	1062	1061	1061	1061	1060	1059	1058	1057	1056	1055	1055	1055	1055	1057	1060	1063	1062	1062	1062	1062	1061	1061	1060	1052	1059
22	1049	1052	1055	1056	1056	1055	1055	1055	1056	1055	1055	1056	1054	1056	1057	1060	1064	1066	1067	1063	1063	1063	1062	1058	1058
23	1053	1055	1056	1055	1051	1051	1052	1052	1052	1050	1051	1050	1051	1053	1058	1062	1073	1079	1073	1068	1067	1073	1072	1052	1059
24	1048	1052	1055	1056	1056	1055	1055	1057	1056	1056	1054	1055	1054	1056	1063	1067	1068	1069	1067	1066	1067	1061	1060	1060	1059
25 q	1057	1058	1058	1058	1058	1058	1056	1056	1057	1054	1051	1052	1053	1056	1057	1058	1058	1061	1061	1061	1062	1063	1062	1063	1058
26	1062	1060	1058	1058	1057	1055	1055	1056	1057	1054	1052	1054	1054	1056	1058	1061	1061	1063	1063	1063	1065	1070	1061	1054	1059
27 d	1057	1061	1049	1055	1057	1056	1055	1055	1056	1056	1057	1056	1059	1058	1060	1062	1063	1063	1067	1072	1069	1072	1074	1068	1061
28	1063	1063	1061	1055	1055	1055	1055	1056	1056	1057	1055	1055	1056	1056	1059	1063	1062	1062	1062	1062	1066	1072	1074	1073	1061
29	1068	1063	1062	1061	1061	1059	1058	1057	1057	1057	1056	1057	1060	1063	1063	1067	1068	1072	1068	1067	1067	1074	1064	1063	1063
30	1062	1062	1061	1061	1060	1057	1057	1056	1057	1057	1057	1057	1061	1061	1063	1063	1063	1068	1076	1072	1073	1075	1075	1066	1063
31	1067	1063	1061	1058	1060	1060	1060	1061	1061	1061	1060	1061	1060	1059	1061	1063	1067	1069	1067	1067	1067	1063	1062	1062	1063
Mean	1059	1060	1059	1057	1056	*1056*	1057	1057	1058	1058	1058	1060	1061	1064	1072	*1079*	*1079*	1078	*1079*	1076	1073	1069	1067	1061	1065

1062 at 0-1h. January 1, 1942.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

149 ESKDALEMUIR — DECEMBER 1941

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	14 52	*990*	*260*	21 38	*730*	15 10	*76·6*	*15·4*	14 59	*61·2*	15 6	*1476*	*935*	23 52	*541*	3,3,4,4,8,8,5,6	41	2	84·8
2 d	18 3	514	401	3 12	113	4 43	52·2	31·4	0 48 / 0 57	23·8	17 50	1100	942	0 0	158	4,5,3,2,3,4,3,1	25	1	84·8
3	21 52	537	483	20 41	54	17 33	51·1	29·9	21 0	21·2	20 40	1098	1068	9 0	30	1,1,1,1,1,2,4,3	14	0	84·9
4	20 41	559	455	21 3	104	13 11	50·2	33·5	21 10	16·7	19 30	1106	1052	3 59	54	3,2,1,3,3,2,4,4	22	1	84·9
5	19 50	552	466	19 6	86	18 9	53·3	30·6	23 0	22·7	19 23	1116	1056	10 0	60	1,1,1,1,2,3,4,3	16	1	84·9
6	21 46	529	486	16 30	43	5 1	48·0	40·3	2 48	7·7	16 37	1085	1061	21 51	24	2,2,2,2,2,2,1,2	15	0	84·8
7	7 39 / 22 40	529	490	11 5	39	13 22	48·5	37·6	23 7	10·9	20 3	1079	1057	11 50	22	1,3,1,1,2,1,2,2	13	0	84·8
8	22 32	561	486	21 42	75	17 41	48·7	37·2	22 29	11·5	22 10	1079	1055	11 0	24	2,2,1,0,2,2,2,4	15	0	84·7
9	23 11	572	478	12 17	94	12 10	49·5	39·6	23 3	9·9	14 58	1073	1043	23 38	30	1,1,1,2,2,1,2,4	14	0	84·6
10	6 30	529	495	15 42	34	12 56	48·5	40·5	0 1	8·0	15 17	1077	1046	0 1	31	2,2,1,1,2,2,0,1	11	0	84·6
11 q	19 3	526	510	10 21	*16*	12 51	47·9	42·8	0 9	5·1	16 20	1066	1057	10 31	*9*	0,1,0,1,1,0,0,0	3	0	84·6
12 q	4 48	534	506	15 11	28	15 10	47·9	41·5	18 6	6·4	18 10	1073	1054	10 45	19	0,1,0,1,2,2,1,2	9	0	84·5
13	10 30	539	460	18 51	79	17 20	56·7	33·2	19 9	23·5	18 51	1163	1046	10 49	117	2,1,2,1,2,3,4,2	17	1	84·4
14 d	20 38	558	432	14 38	126	3 3	55·6	21·1	21 6	34·5	14 59	1103	1009	3 23	94	4,3,2,4,4,3,4,4	28	1	84·5
15	21 33	565	487	14 39	78	1 43	48·6	31·6	21 21	17·0	21 29	1074	1054	4 50	20	2,2,2,2,3,1,1,4	17	1	84·4
16 d	3 49	560	464	4 19	96	15 18	48·2	34·1	3 12	14·1	4 40	1068	1007	3 58	61	3,4,2,2,1,1,1,2	16	1	84·4
17	22 49	586	479	18 11	107	17 52	51·9	31·4	22 6	20·5	20 27	1087	1050	8 28	37	2,2,2,2,1,3,3,4	19	1	84·4
18	15 34	555	492	9 20	63	7 5	52·1	38·9	7 43	13·2	22 8	1075	1045	7 22	30	1,2,3,3,3,3,1,2	18	1	84·3
19	0 9	530	491	10 44	39	12 30	48·7	40·1	22 35	8·6	21 20	1075	1055	7 39	20	2,1,2,1,2,2,2,2	14	0	84·3
20 q	6 50	526	499	15 21	27	15 8	47·9	42·3	0 53 / 21 10	5·6	15 44	1073	1055	9 50	18	2,0,1,1,1,2,1,1	9	0	84·2
21 q	23 37	558	515	0 50 / 10 38	43	14 2	47·0	38·7	22 36	8·3	15 50	1063	1045	23 55	18	0,1,1,1,1,1,1,3	9	0	84·1
22	23 58	535	502	17 58	33	13 33	46·8	42·1	21 20	*4·7*	18 0	1068	1046	0 1	22	1,1,1,1,1,2,2,2	11	0	84·2
23	23 30	574	476	16 57	98	16 10	49·5	34·1	23 51	15·4	17 4	1085	1043	23 58	42	2,2,1,2,2,3,2,4	18	1	84·2
24	22 3	537	491	12 8	46	12 53	50·5	36·0	20 21	14·5	17 45	1073	1043	0 1	30	2,1,1,2,2,2,3,2	15	0	84·0
25 q	9 4	534	511	0 13	23	12 56	48·5	42·6	23 50	5·9	21 39	1064	1051	10 42	13	1,0,2,2,1,1,1,1	9	0	84·1
26	22 18	571	484	23 28	87	13 50	47·8	37·8	23 21	10·0	21 48	1072	1051	5 37	21	1,2,1,2,2,2,1,4	15	0	84·1
27 d	23 34	569	476	1 19	93	18 3	49·4	27·9	23 29	21·5	23 13	1076	1048	2 40	28	4,3,1,2,2,2,2,4	20	1	84·1
28	19 50	534	491	0 19	43	14 19	47·7	36·9	24 0	10·8	22 2	1075	1052	6 26	23	3,2,2,1,2,2,2,3	17	0	83·9
29	0 14	549	491	0 50	58	16 19	48·6	30·6	0 10	18·0	21 36	1079	1055	10 28	24	3,1,1,2,1,3,2,3	16	1	84·1
30	20 13	526	484	18 0	42	22 53	49·0	39·6	22 3	9·4	22 0	1080	1055	7 50	25	1,1,1,0,1,3,3,3	13	1	84·1
31	20 55	540	495	16 58	45	17 18	48·5	38·8	0 8	9·7	17 6	1073	1056	13 5	17	2,0,1,0,1,2,2,2	10	0	84·1
Mean	- -	561	475	- -	85	- -	50·6	35·4	- -	15·2	- -	1095	1042	- -	54	-	-	0·48	84·4

q denotes an international quiet day and d an international disturbed day.

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

150 ESKDALEMUIR 1941

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·3	+0·3	+0·3	+0·5	+3·9	+7·2	+8·6	+8·5	+3·8	+0·1	-7·0	-10·0	-10·2	-10·4	-6·1	-5·7	-5·4	0·0	-1·6	+3·2	+3·1	+8·7	+3·9	+4·1
Feb.	+5·1	+5·1	+2·5	+1·5	+5·4	+10·1	+8·2	+8·0	+2·8	-7·4	-15·5	-13·9	-13·0	-12·7	-9·7	-2·6	+1·4	+1·7	+2·0	+3·1	+4·4	+3·8	+4·3	+5·4
Mar.	+1·9	-9·0	-3·0	-5·0	+3·1	+5·4	+1·4	-3·0	-9·4	-19·1	-24·5	-23·0	-16·2	-4·2	+10·9	+5·3	+8·1	+30·8	+19·3	+14·3	+9·9	+6·8	+0·2	-0·8
Apr.	+7·7	+0·9	+3·6	+3·3	+3·9	+2·7	+4·7	+0·2	-4·5	-16·1	-23·0	-27·8	-26·5	-19·0	-12·4	+0·5	+8·1	+13·6	+15·6	+16·8	+12·6	+12·5	+11·2	+11·2
May	+6·9	+3·1	+3·1	+3·2	+2·6	+3·6	-1·3	-6·5	-11·1	-17·7	-23·3	-28·3	-25·3	-19·3	-10·3	-1·0	+8·4	+17·7	+22·7	+21·5	+17·4	+12·8	+11·6	+9·5
June	+6·4	+5·7	+4·6	+6·8	+8·4	+5·4	-1·1	-8·6	-15·5	-23·3	-28·3	-29·8	-26·8	-20·3	-11·3	-2·7	+9·2	+16·1	+24·3	+27·0	+20·3	+14·2	+11·2	+8·0
July	+7·6	+4·8	+1·0	+1·1	+5·3	+8·5	-5·1	-16·9	-28·8	-29·3	-34·3	-36·4	-10·1	-7·9	+9·9	+14·9	+8·5	+15·5	+21·0	+20·7	+17·3	+13·9	+9·5	+9·3
Aug.	-2·2	+7·2	+7·1	+7·9	+5·1	+6·3	+0·7	-8·4	-20·1	-29·6	-34·5	-31·7	-27·3	-15·7	+0·1	+10·1	+15·9	+20·2	+22·5	+21·7	+16·6	+11·9	+9·9	+6·1
Sept.	-6·6	-2·7	-3·4	-3·3	-2·9	-0·6	-1·4	-4·1	-10·4	-17·3	-25·2	-25·2	-9·5	+9·6	+7·3	+23·8	+32·3	+27·1	+21·9	-2·9	-7·3	-3·2	+2·2	+1·8
Oct.	+8·9	+7·0	+6·6	+9·3	+11·9	+11·9	+8·0	+4·2	-2·6	-12·7	-21·7	-24·1	-19·1	-15·5	-10·1	-3·4	+2·6	+19·6	+5·6	+7·0	+6·3	+5·1	+4·4	-9·3
Nov.	-2·9	-4·8	0·0	+5·8	+9·8	+6·7	+5·9	+2·1	-2·7	-8·9	-12·6	-12·4	-11·4	-8·8	-2·3	-1·9	+4·0	+2·7	+5·6	+3·1	+6·3	+6·2	+3·7	+6·8
Dec.	+0·6	-2·3	-0·6	+0·2	+3·1	+5·7	+7·6	+6·7	+3·4	+0·4	-3·9	-4·2	-5·5	-3·7	+1·4	+1·3	-2·2	-5·4	-4·3	-1·3	-0·2	-0·4	+2·1	+1·2
Year	+2·9	+1·3	+1·8	+2·6	+5·0	+6·1	+3·0	-1·5	-7·9	-15·1	-21·1	-22·3	-16·8	-10·6	-2·7	+3·2	+7·6	+13·3	+12·9	+11·2	+8·9	+7·7	+6·1	+4·5
Winter	+0·8	-0·4	+0·6	+2·0	+5·5	+7·5	+7·6	+6·4	+1·8	-3·9	-9·8	-10·1	-10·0	-8·9	-4·1	-2·3	-0·6	-0·3	+0·5	+2·0	+3·4	+4·5	+3·5	+4·4
Equinox	+3·0	-0·9	+0·9	+1·1	+4·1	+4·8	+3·2	-0·7	-6·8	-16·3	-23·6	-25·1	-17·9	-7·3	-1·1	+6·5	+12·8	+22·7	+15·6	+8·7	+5·4	+5·3	+4·5	+0·8
Summer	+4·7	+5·3	+4·0	+4·7	+5·3	+6·0	-1·7	-10·1	-18·8	-24·9	-30·1	-31·5	-22·5	-15·8	-3·0	+5·3	+10·5	+17·3	+22·6	+22·7	+17·9	+13·2	+10·5	+8·3

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-9·1	-8·1	-7·7	-3·9	-1·3	-1·0	+1·4	+2·4	+1·5	+3·1	+3·5	+8·2	+14·7	+17·4	+13·4	+11·7	+4·4	-2·6	+0·4	-7·8	-6·8	-10·9	-12·7	-10·3
Feb.	-7·1	-5·4	-9·4	-3·7	-5·2	-2·9	+0·4	+0·4	+0·7	+1·5	+6·1	+12·3	+18·0	+21·1	+18·4	+12·4	+4·3	+2·2	-3·5	-6·9	-9·8	-16·6	-14·8	-12·5
Mar.	-7·8	-10·2	-11·0	-9·4	-4·3	-4·7	-4·5	-5·3	-7·2	-5·7	+5·1	+15·1	+25·2	+28·5	+27·4	+20·4	+7·9	+10·3	+1·1	-7·0	-12·3	-16·5	-16·6	-18·4
Apr.	-8·6	-7·3	-5·6	-7·0	-6·9	-4·2	-5·0	-12·6	-17·1	-16·5	-7·1	+5·5	+19·4	+28·7	+27·0	+21·9	+16·4	+13·5	+1·2	+0·3	-3·7	-7·4	-13·6	-11·3
May	-7·9	-7·2	-12·9	-14·5	-13·5	-15·8	-17·9	-19·9	-21·9	-17·4	-7·1	+5·7	+18·6	+25·1	+26·3	+24·5	+22·5	+19·8	+14·8	+8·5	+2·8	-1·6	-4·8	-6·0
June	-8·7	-11·9	-15·4	-15·1	-18·4	-22·0	-23·1	-23·8	-24·3	-21·2	-9·6	+4·2	+16·8	+25·3	+29·0	+30·2	+27·7	+22·6	+19·7	+15·2	+7·6	+1·9	-0·9	-5·7
July	-3·7	-6·7	-5·2	-13·2	-15·4	-19·6	-18·8	-22·7	-28·2	-19·7	-14·6	-4·7	+13·0	+23·3	+29·0	+27·7	+23·7	+19·5	+17·3	+12·4	+6·7	+3·3	-0·5	-3·0
Aug.	-7·6	-10·7	-12·6	-14·8	-13·9	-19·3	-20·7	-23·6	-22·2	-13·7	-2·8	+12·2	+26·9	+35·3	+34·5	+28·5	+21·0	+10·7	+7·3	+2·5	-1·4	-2·6	-7·0	-5·9
Sept.	-16·2	-15·5	-19·7	-19·1	-17·6	-10·0	-11·2	-11·5	-14·5	-10·0	-2·9	+9·8	+28·8	+38·1	+36·7	+32·2	+25·1	+18·6	+8·9	-1·5	-9·4	-13·9	-8·4	-17·0
Oct.	-8·3	-6·4	-6·9	-4·0	-4·5	-4·8	-3·7	-5·2	-9·8	-11·9	-3·3	+9·7	+20·1	+24·5	+23·0	+18·0	+13·4	+13·9	+1·8	+0·7	-9·1	-14·9	-15·3	-17·1
Nov.	-16·0	-11·5	-10·3	-6·5	-0·4	+1·7	+6·1	+3·8	-1·7	-1·0	+3·5	+10·4	+16·3	+17·6	+13·6	+11·2	+10·4	+4·6	-2·4	-2·7	-9·1	-12·8	-13·4	-11·6
Dec.	-11·8	-8·7	-5·7	-2·2	-0·7	-1·1	-0·9	-1·2	0·0	+0·4	+3·4	+9·0	+12·7	+14·9	+15·3	+13·7	+10·4	+5·8	+3·0	-4·5	-8·3	-15·7	-15·4	-12·4
Year	-9·4	-9·1	-10·2	-9·5	-8·5	-8·6	-8·2	-9·9	-12·0	-9·3	-2·1	+8·1	+19·2	+25·0	+24·5	+21·0	+15·6	+11·6	+5·8	+0·8	-4·4	-9·0	-10·3	-10·9
Winter	-11·0	-8·4	-8·3	-4·1	-1·9	-0·8	+1·7	+1·3	+0·1	+1·0	+4·1	+10·0	+15·4	+17·8	+15·2	+12·2	+7·3	+2·5	-0·6	-5·5	-8·5	-14·0	-14·0	-11·7
Equinox	-10·2	-9·8	-10·8	-9·9	-8·3	-5·9	-6·1	-8·7	-12·2	-11·0	-2·1	+10·0	+23·4	+30·0	+28·5	+23·1	+15·7	+14·1	+3·2	-1·9	-8·6	-13·2	-13·5	-15·9
Summer	-7·0	-9·1	-11·5	-14·4	-15·3	-19·2	-20·1	-22·5	-24·1	-18·0	-8·6	+4·4	+18·8	+27·3	+29·8	+27·7	+23·7	+18·1	+14·7	+9·6	+3·9	+0·2	-3·3	-5·2

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-6·3	-7·3	-7·2	-7·3	-8·4	-7·9	-6·9	-6·7	-5·8	-4·8	-3·3	-2·6	-2·1	+2·3	+6·4	+8·7	+15·0	+16·0	+11·8	+9·8	+6·8	+2·7	+0·4	-3·3
Feb.	-8·2	-11·2	-12·0	-12·7	-12·3	-10·7	-9·3	-8·3	-7·1	-5·6	-5·0	-3·1	-1·0	+3·0	+8·0	+13·1	+16·8	+16·5	+15·4	+14·4	+12·1	+8·4	+2·8	-4·0
Mar.	-15·7	-23·3	-20·7	-15·6	-12·0	-10·7	-7·7	-4·4	-2·3	-0·5	+0·7	+1·3	+2·4	+9·9	+9·5	+5·2	+6·3	+16·8	+16·3	+25·8	+23·8	+17·9	+5·5	-5·1
Apr.	-6·0	-10·0	-10·6	-9·2	-7·3	-7·9	-6·8	-4·9	-4·8	-5·4	-7·0	-8·6	-8·6	-3·7	+6·4	+11·4	+16·8	+17·9	+18·2	+14·6	+10·8	+7·7	+0·8	-3·8
May	-4·0	-9·4	-8·4	-7·9	-6·2	-7·5	-5·8	-5·6	-5·8	-7·5	-10·0	-10·9	-9·6	-3·8	+2·9	+7·4	+10·9	+15·3	+18·2	+17·8	+16·2	+10·6	+2·9	+0·2
June	-4·9	-6·7	-6·8	-6·6	-3·7	-1·8	-1·4	-1·8	-2·6	-4·5	-8·8	-11·0	-10·1	-6·8	-2·0	+2·9	+7·9	+11·9	+13·6	+14·1	+13·3	+10·4	+5·1	+0·3
July	-6·3	-10·6	-16·6	-14·2	-9·7	-5·3	-7·7	-9·4	-6·8	-6·4	-1·3	+2·2	-4·3	+2·4	+8·2	+11·8	+12·3	+13·7	+13·9	+13·7	+11·5	+5·9	+2·5	+0·5
Aug.	-19·0	-18·4	-15·2	-9·7	-6·6	-6·4	-4·6	-3·6	-3·6	-6·8	-9·9	-10·9	-9·6	-3·2	+11·8	+17·5	+22·8	+25·5	+22·4	+19·3	+13·0	+4·8	-1·4	-8·2
Sept.	-23·6	+1·3	-20·4	-23·3	-25·5	-21·6	-7·6	-6·0	-2·4	-0·6	+0·1	-0·8	+4·4	+11·5	+18·0	+19·1	+25·0	+23·9	+18·2	+14·7	+9·0	+5·1	-6·4	-12·1
Oct.	-8·6	-7·3	-6·4	-8·3	-8·2	-7·1	-6·4	-4·4	-2·2	-2·1	-4·6	-5·8	-5·0	-1·6	+3·4	+7·9	+11·5	+15·4	+17·9	+15·8	+12·1	+5·0	-2·0	-9·0
Nov.	-9·5	-13·7	-12·5	-13·5	-15·7	-14·2	-12·8	-10·1	-5·9	-3·4	-2·6	+0·4	+3·8	+8·4	+9·2	+14·9	+15·9	+14·9	+15·4	+13·3	+10·2	+5·2	+2·5	-0·2
Dec.	-6·1	-4·8	-5·7	-8·2	-8·6	-8·6	-7·4	-7·2	-6·9	-6·7	-6·3	-4·9	-3·5	-0·4	+7·1	+14·0	+14·0	+13·0	+14·0	+11·5	+8·0	+4·8	+2·4	-3·5
Year	-9·9	-10·1	-11·9	-11·4	-10·3	-9·1	-7·0	-6·0	-4·7	-4·5	-4·8	-4·6	-3·6	+1·5	+7·1	+11·3	+15·5	+16·7	+17·1	+15·2	+11·7	+6·3	+0·4	-4·7
Winter	-7·5	-9·3	-9·3	-10·4	-11·3	-10·3	-9·1	-8·1	-6·4	-5·1	-4·3	-2·5	-0·7	+3·3	+7·7	+12·7	+15·4	+15·1	+14·1	+12·3	+9·3	+5·3	+2·0	-2·7
Equinox	-13·5	-9·8	-14·5	-14·1	-13·3	-11·8	-7·1	-4·9	-2·9	-2·1	-2·7	-3·5	-1·7	+4·0	+8·3	+11·2	+17·5	+18·4	+20·0	+17·2	+12·5	+5·8	-3·2	-9·7
Summer	-8·5	-11·3	-11·7	-9·6	-6·5	-5·8	-4·9	-5·1	-4·7	-6·3	-7·5	-7·7	-8·4	-2·9	+5·2	+9·9	+13·5	+16·6	+17·0	+16·2	+13·5	+7·9	+2·3	-1·8

DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS, DECLINATION, INCLINATION, AND HORIZONTAL FORCE

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

151 ESKDALEMUIR 1941

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·87	-1·65	-1·59	-0·82	-0·44	-0·53	-0·12	+0·10	+0·13	+0·63	+1·04	+2·13	+3·46	*+4·02*	+3·01	+2·64	+1·15	-0·52	+0·15	-1·74	-1·53	-2·62	*-2·75*	-2·28
Feb.	-1·69	-1·33	-2·02	-0·83	-1·30	-1·06	-0·30	-0·30	+0·01	+0·65	+1·96	+3·15	+4·26	*+4·88*	+4·19	+2·64	+0·80	+0·37	-0·80	-1·55	-2·20	*-3·55*	-3·20	-2·78
Mar.	-1·68	-1·65	-2·10	-1·67	-1·03	-1·20	-0·98	-0·94	-1·03	-0·27	+2·16	+4·13	+5·87	*+5·99*	+5·07	+3·89	+1·23	+0·66	-0·67	-2·08	-2·96	-3·67	-3·38	*-3·69*
Apr.	-2·10	-1·52	-1·31	-1·57	-1·59	-0·97	-1·24	-2·57	-3·27	-2·61	-0·38	+2·41	+5·16	*+6·71*	+6·06	+4·43	+2·95	+2·10	-0·48	-0·72	-1·33	-2·07	*-3·28*	-2·81
May	-1·93	-1·61	-2·76	-3·08	-2·86	-3·37	-3·56	-3·73	*-3·93*	-2·72	-0·37	+2·46	+4·94	*+5·98*	+5·80	+5·00	+4·18	+3·19	+1·95	+0·73	-0·23	-0·92	-1·50	-1·66
June	-2·05	-2·68	-3·34	-3·38	-4·12	*-4·71*	-4·62	-4·42	-4·21	-3·23	-0·65	+2·22	+4·65	+6·06	*+6·41*	+6·25	+5·19	+3·84	+2·87	+1·83	+0·61	-0·28	-0·71	-1·53
July	-1·11	-1·58	-1·10	-2·74	-3·37	-4·37	-3·59	-3·84	*-4·41*	-2·65	-1·39	+0·73	+3·10	+5·11	*+5·44*	+4·94	+4·43	+3·25	+2·56	+1·56	+0·56	+0·04	-0·53	-1·04
Aug.	-1·45	-2·51	-2·89	-3·37	-3·06	-4·21	-4·23	*-4·41*	-3·58	-1·43	+1·02	+3·94	+6·72	*+7·90*	+7·01	+5·32	+3·54	+1·24	+0·44	-0·50	-1·05	-1·08	-1·87	-1·49
Sept.	-2·99	-3·02	*-3·84*	-3·74	-3·44	-2·00	-2·22	-2·16	-2·46	-1·24	+0·58	+3·16	+6·30	*+7·30*	+7·12	+5·45	+3·61	+2·54	+0·81	-0·16	-1·58	-2·67	-1·81	-3·54
Oct.	-2·09	-1·63	-1·71	-1·25	-1·45	-1·52	-1·12	-1·25	-1·88	-1·84	+0·32	+3·08	+4·97	*+5·70*	+5·15	+3·82	+2·60	+1·93	+0·10	-0·19	-2·13	-3·26	*-3·31*	-3·04
Nov.	*-3·11*	-2·11	-2·09	-1·59	-0·53	+0·04	+0·96	+0·68	-0·22	+0·21	+1·30	+2·69	+3·84	*+3·99*	+2·87	+2·36	+1·93	+0·81	-0·74	-0·68	-2·15	-2·88	-2·90	-2·68
Dec.	-2·42	-1·66	-1·13	-0·46	-0·28	-0·48	-0·53	-0·55	-0·15	+0·06	+0·86	+2·01	+2·82	*+3·19*	+3·04	+2·71	+2·21	+1·42	+0·80	-0·86	-1·67	-3·15	*-3·21*	-2·57
Year	-2·04	-1·91	-2·16	-2·04	-1·96	-2·03	-1·80	-1·95	-2·08	-1·20	+0·54	+2·68	+4·67	*+5·57*	+5·10	+4·12	+2·82	+1·74	+0·58	-0·36	-1·31	-2·18	-2·37	*-2·43*
Winter	-2·27	-1·69	-1·71	-0·93	-0·64	-0·51	0·00	-0·02	-0·06	+0·39	+1·29	+2·49	+3·59	*+4·02*	+3·28	+2·59	+1·52	+0·52	-0·15	-1·21	-1·89	*-3·05*	-3·01	-2·58
Equinox	-2·21	-1·95	-2·24	-2·06	-1·88	-1·42	-1·39	-1·73	-2·16	-1·49	+0·67	+3·19	+5·57	*+6·43*	+5·85	+4·40	+2·60	+1·81	-0·06	-0·79	-2·00	-2·92	-2·95	*-3·27*
Summer	-1·63	-2·09	-2·52	-3·14	-3·35	*-4·17*	-4·00	-4·10	-4·03	-2·51	-0·35	+2·34	+4·85	*+6·26*	+6·17	+5·38	+4·33	+2·88	+1·95	+0·91	-0·03	-0·56	-1·15	-1·43

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·03	-0·08	-0·08	-0·16	-0·44	-0·65	*-0·75*	*-0·75*	-0·41	-0·17	+0·33	+0·47	+0·40	+0·48	+0·35	+0·41	*+0·66*	+0·43	+0·39	+0·15	+0·07	-0·35	-0·06	-0·20
Feb.	-0·43	-0·53	-0·32	-0·35	-0·58	*-0·88*	-0·77	-0·73	-0·37	+0·33	*+0·80*	+0·65	+0·57	+0·59	+0·56	+0·31	+0·26	+0·26	+0·27	+0·26	+0·15	+0·21	+0·01	-0·27
Mar.	-0·40	+0·16	-0·15	+0·09	-0·44	-0·55	-0·21	+0·17	+0·67	+1·33	*+1·54*	+1·31	+0·75	+0·09	-1·00	-0·50	-0·24	*-1·77*	-0·64	-0·24	+0·02	-0·06	+0·11	-0·01
Apr.	-0·52	-0·20	-0·41	-0·34	-0·33	-0·30	-0·40	+0·06	+0·44	+1·17	+1·44	*+1·53*	+1·23	+0·72	+0·50	-0·08	-0·36	-0·65	-0·59	*-0·74*	-0·50	-0·51	-0·51	-0·65
May	-0·43	-0·32	-0·22	-0·19	-0·12	-0·18	+0·21	+0·58	+0·91	+1·23	+1·39	*+1·50*	+1·14	+0·79	+0·35	-0·12	-0·62	-1·07	*-1·25*	-1·10	-0·78	-0·55	-0·62	-0·53
June	-0·41	-0·36	-0·24	-0·39	-0·37	-0·07	+0·39	+0·88	+1·31	+1·73	*+1·78*	+1·62	+1·26	+0·78	+0·26	-0·20	-0·82	-1·09	-1·56	*-1·65*	-1·11	-0·70	-0·59	-0·43
July	-0·60	-0·48	-0·40	-0·22	-0·36	-0·40	+0·42	+1·22	+2·14	+2·06	+2·44	*+2·51*	+0·37	+0·23	-0·88	-1·09	-0·61	-0·97	*-1·29*	-1·20	-0·95	-0·82	-0·56	-0·55
Aug.	-0·21	-0·77	-0·66	-0·54	-0·29	-0·29	+0·15	+0·81	+1·56	+1·98	*+2·07*	+1·63	+1·16	+0·43	-0·23	-0·66	-0·80	-0·86	*-1·03*	-0·98	-0·75	-0·62	-0·58	-0·51
Sept.	+0·09	+0·44	+0·01	-0·08	-0·18	-0·35	+0·07	+0·29	+0·84	+1·27	*+1·70*	+1·49	+0·30	-0·91	-0·58	-1·57	*-1·88*	-1·46	-1·12	+0·58	+0·84	+0·54	-0·18	-0·17
Oct.	-0·68	-0·55	-0·49	-0·76	-0·92	-0·89	-0·63	-0·30	+0·26	+0·96	*+1·36*	+1·29	+0·83	+0·61	+0·41	+0·15	-0·09	*-1·11*	+0·05	-0·08	+0·02	+0·01	-0·11	+0·64
Nov.	+0·19	+0·15	-0·15	-0·62	*-1·03*	-0·82	-0·80	-0·45	+0·06	+0·52	*+0·71*	+0·67	+0·60	+0·53	+0·17	+0·33	-0·02	+0·12	+0·05	+0·17	-0·02	-0·09	+0·01	-0·28
Dec.	-0·01	+0·16	-0·01	-0·18	-0·41	-0·57	*-0·67*	-0·60	-0·39	-0·20	+0·05	+0·01	+0·07	0 00	-0·15	+0·05	+0·33	*+0·59*	+0·58	+0·44	+0·34	+0·39	+0·16	+0·03
Year	-0·29	-0·19	-0·26	-0·31	-0·46	-0·50	-0·25	+0·10	+0·58	+1·02	*+1·30*	+1·23	+0·73	+0·36	-0·01	-0·25	-0·35	*-0·63*	-0·51	-0·37	-0·23	-0·21	-0·24	-0·25
Winter	-0·07	-0·08	-0·14	-0·33	-0·62	-0·73	*-0·75*	-0·64	-0·28	+0·12	*+0·47*	+0·45	+0·41	+0·40	+0·23	+0·28	+0·31	+0·35	+0·33	+0·26	+0·14	+0·04	+0·03	-0·18
Equinox	-0·38	-0·03	-0·26	-0·28	-0·47	-0·52	-0·30	+0·05	+0·55	+1·18	*+1·52*	+1·41	+0·78	+0·13	-0·15	-0·50	-0·64	*-1·25*	-0·58	-0·12	+0·09	0·00	-0·17	-0·05
Summer	-0·41	-0·49	-0·38	-0·33	-0·28	-0·24	+0·29	+0·88	+1·48	+1·75	*+1·92*	+1·82	+0·99	+0·55	-0·12	-0·52	-0·71	-1·00	*-1·28*	-1·24	-0·90	-0·67	-0·58	-0·51

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-1·8	-1·5	-1·4	-0·4	+3·5	+6·8	+8·7	*+8·8*	+4·0	+0·8	-6·0	*-7·9*	-6·7	-6·3	-2·9	-3·0	-4·3	-0·6	-1·5	+1·4	+1·5	+6·1	+1·0	+1·7
Feb.	+3·4	+3·8	+0·4	+0·6	+4·1	+9·2	+8·1	+7·9	+2·9	-6·9	*-13·8*	-10·8	-8·7	-7·7	-5·3	+0·2	+2·3	+2·1	+1·2	+1·5	+2·1	0·0	+0·9	+2·5
Mar.	+0·1	-11·0	-5·4	-7·0	+2·1	+4·2	+0·4	-4·1	-10·8	-19·9	*-22·8*	-19·1	-10·2	+2·3	+16·7	+9·7	+9·7	*+32·3*	+19·0	+12·4	+6·9	+2·9	-3·5	-4·9
Apr.	+5·6	-0·8	+2·3	+1·7	+2·3	+1·7	+3·5	-2·6	-8·2	-19·4	-24·0	*-25·9*	-21·5	-12·1	-6·1	+5·4	+11·6	+16·3	+15·5	*+16·4*	+11·5	+10·5	+7·9	+8·4
May	+5·0	+1·4	+0·1	-0·1	-0·5	0·0	-5·2	-10·8	-15·7	-21·1	-24·3	*-26·3*	-20·5	-13·2	-4·2	+4·5	+13·2	+21·6	*+25·4*	+22·9	+17·6	+12·1	+10·2	+7·9
June	+4·3	+2·9	+1·1	+3·3	+4·1	+0·4	-6·2	-13·7	-20·5	-27·4	*-29·7*	-28·1	-22·4	-14·2	-4·6	+4·1	+15·1	+20·7	+28·1	*+29·7*	+21·5	+14·3	+10·7	+6·5
July	+6·6	+3·2	-0·2	-1·9	+1·8	+4·0	-9·1	-21·5	-34·3	-32·9	*-36·7*	-36·5	-7·0	-2·5	+16·1	+20·6	+13·5	+19·4	*+24·3*	+22·9	+18·3	+14·3	+9·2	+8·4
Aug.	-3·8	+4·7	+4·2	+4·4	+1·9	+1·9	-3·9	-13·4	-24·5	-31·9	*-34·3*	-28·2	-20·7	-7·5	+7·7	+16·2	+20·2	+22·1	*+23·6*	+21·7	+15·9	+11·0	+8·1	+4·6
Sept.	-10·0	-6·1	-7·7	-7·4	-6·7	-2·8	-3·8	-6·5	-13·3	-19·1	*-25·2*	-22·4	-2·9	+17·8	+15·2	+30·3	*+37·1*	+30·5	+23·3	-3·2	-9·2	-6·2	+0·3	-2·0
Oct.	+6·9	+5·4	+4·9	+8·2	+10·6	+10·6	+7·0	+2·9	-4·7	-15·0	*-21·9*	-21·4	-14·2	-9·7	-4·8	+0·7	+5·5	+22·2	+5·9	+7·0	+4·1	+1·7	+0·9	-12·8
Nov.	-6·4	-7·2	-2·3	+4·2	+9·5	+6·9	+7·1	+2·9	-3·0	-8·9	*-11·5*	-9·8	-7·5	-4·7	+0·8	+0·6	+6·2	+3·7	+4·9	+2·4	+4·1	+3·2	+0·7	+4·1
Dec.	-2·1	*-4·2*	-1·9	-0·3	+2·9	+5·3	+7·2	+6·3	+3·3	+0·5	-3·0	-2·0	-2·4	-0·2	+4·9	+4·4	+0·3	-3·9	-3·5	-2·3	-2·1	-4·0	-1·5	-1·7
Year	+0·7	-0·8	-0·5	+0·4	+3·0	+4·0	+1·1	-3·7	-10·4	-16·8	*-21·1*	-19·9	-12·1	-4·8	+2·8	+7·8	+10·9	*+15·5*	+13·9	+11·1	+7·7	+5·5	+3·7	+1·9
Winter	-1·7	-2·3	-1·3	+1·0	+5·0	+7·1	*+7·8*	+6·5	+1·8	-3·6	*-8·6*	-7·6	-6·3	-4·7	-0·6	+0·5	+1·1	+0·3	+0·3	+0·7	+1·4	+1·3	+0·3	+1·7
Equinox	+0·7	-3·1	-1·5	-1·1	+2·1	+3·4	+1·8	-2·6	-9·3	-18·3	*-23·5*	-22·2	-12·2	-0·4	+5·3	+11·5	+16·0	*+25·3*	+15·9	+8·1	+3·3	+2·2	+1·4	-2·8
Summer	+3·0	+3·1	+1·3	+1·4	+1·8	+1·6	-6·1	-14·9	-23·7	-28·3	*-31·3*	-29·8	-17·7	-9·3	+3·7	+11·3	+15·5	+20·9	*+25·3*	+24·3	+18·3	+12·9	+9·5	+6·9

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

152 ESKDALEMUIR 1941

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-4·1	-2·4	-1·7	-2·3	+1·6	+3·0	+5·1	+4·3	+2·7	+1·1	-4·5	-7·0	-7·2	-4·6	-0·8	-3·1	-0·2	+2·2	+4·3	+4·6	+4·6	+5·7	+1·3	-2·3
Feb.	+5·4	+4·6	+2·1	+2·3	+5·0	+5·8	+5·7	+5·4	+4·4	-5·0	-6·4	-9·3	-11·3	-8·6	-4·3	-1·5	+3·5	+0·4	-2·7	+3·1	-1·5	-0·5	+0·8	+2·5
Mar.	+6·1	-0·7	+1·2	+0·7	+6·7	+4·7	+4·0	+3·1	-2·1	-14·7	-20·6	-22·9	-17·4	-11·7	-5·5	+0·4	+3·1	+4·1	+5·7	+9·5	+10·0	+10·3	+14·1	+11·7
Apr.	+5·3	+5·3	+5·4	+4·1	+2·8	+3·4	+2·2	+3·1	+0·7	-11·3	-21·8	-28·1	-26·9	-17·0	-9·1	-4·6	+5·9	+10·1	+13·8	+12·8	+12·4	+11·3	+10·8	+9·6
May	+3·9	-0·9	-3·2	-0·8	+4·3	+6·1	+3·3	+2·0	-2·8	-12·0	-19·2	-25·4	-24·0	-17·7	-12·5	-2·5	+7·6	+15·1	+19·4	+15·9	+12·8	+9·4	+9·2	+12·2
June	+6·5	+7·0	+6·0	+5·6	+7·8	+6·1	+1·0	-3·9	-8·7	-15·6	-21·6	-28·2	-25·2	-21·6	-14·0	-8·6	+6·4	+18·0	+19·4	+18·3	+14·4	+13·0	+9·5	+8·2
July	+7·4	+4·8	+5·1	+7·3	+8·9	+8·6	+6·5	+1·8	-6·2	-18·9	-28·1	-33·1	-33·8	-31·2	-17·4	-4·1	+5·5	+12·5	+17·4	+19·1	+19·2	+17·9	+16·4	+14·4
Aug.	+7·3	+7·9	+8·1	+5·4	+6·6	+4·8	+3·6	-2·5	-9·1	-19·3	-25·6	-31·7	-31·7	-20·9	-14·9	-5·8	+2·5	+9·2	+16·6	+19·3	+18·4	+19·0	+18·6	+14·1
Sept.	+8·8	+9·1	+7·4	+7·7	+5·7	+3·1	+0·9	-3·6	-10·0	-21·0	-31·5	-31·7	-22·7	-13·0	-5·1	-0·7	+3·1	+10·2	+13·1	+14·4	+12·9	+15·8	+13·8	+13·5
Oct.	+5·1	+3·3	+4·0	+6·2	+7·1	+7·6	+8·6	+3·1	-5·9	-18·4	-24·4	-24·1	-20·4	-14·4	-7·3	-2·4	+3·0	+2·5	+10·0	+11·8	+11·8	+10·8	+11·7	+10·6
Nov.	-3·6	-2·0	+0·1	+3·1	+3·7	+4·7	+4·5	+4·3	+2·0	-4·0	-10·0	-12·4	-12·3	-8·6	-5·1	-2·6	+0·7	+4·1	+5·5	+7·3	+9·5	+4·0	+2·7	+4·3
Dec.	-2·9	-3·4	-0·8	+0·1	+3·1	+5·2	+5·1	+4·3	+3·9	-0·2	-4·1	-4·7	-3·7	-2·7	-2·6	-6·1	-2·0	-0·4	+1·0	+1·9	+1·7	+0·8	+3·2	+3·4
Year	+3·8	+2·7	+2·9	+3·3	+5·3	+5·3	+4·2	+1·7	-2·5	-11·6	-18·2	-21·6	-19·7	-14·3	-8·3	-3·5	+3·2	+7·4	+10·3	+11·5	+10·5	+9·7	+9·4	+8·6
Winter	-1·3	-0·8	0·0	+0·8	+3·3	+4·7	+5·1	+4·6	+3·3	-2·0	-6·3	-8·3	-8·7	-6·2	-3·1	-3·3	+0·5	+1·6	+2·0	+4·2	+3·6	+2·5	+2·0	+2·0
Equinox	+6·4	+4·2	+4·5	+4·7	+5·5	+4·7	+4·0	+1·5	-4·3	-16·3	-24·6	-26·7	-21·9	-14·1	-6·8	-1·8	+3·8	+6·7	+10·7	+12·1	+11·7	+12·1	+12·6	+11·4
Summer	+6·3	+4·7	+4·0	+4·4	+6·9	+6·4	+3·6	-0·6	-6·7	-16·5	-23·6	-29·6	-28·7	-22·9	-14·7	-5·3	+5·5	+13·7	+18·3	+18·1	+16·2	+14·8	+13·5	+12·2

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-7·1	-6·2	-8·8	-3·8	-4·2	-3·5	-3·7	-3·7	-2·8	-0·5	+1·8	+6·1	+10·1	+11·7	+8·9	+5·1	+4·3	+4·3	+4·7	+2·9	+0·5	-2·8	-5·8	-7·4
Feb.	-10·3	-10·6	-9·9	-7·1	-5·4	-3·4	-1·8	-3·6	-3·5	-2·6	+3·5	+7·8	+12·6	+12·2	+12·8	+9·4	+9·4	+6·6	+6·4	-2·1	-0·2	-3·9	-6·6	-9·7
Mar.	-10·2	-7·9	-3·1	-6·3	-8·1	-9·1	-9·2	-13·1	-16·3	-15·1	-4·7	+9·0	+19·8	+24·0	+18·2	+13·0	+6·5	+3·6	+2·2	+4·5	+2·6	0·0	-2·0	+1·4
Apr.	-4·2	-3·7	-4·2	-7·8	-8·9	-6·5	-9·5	-15·1	-19·7	-18·9	-10·0	+1·1	+13·8	+21·9	+21·2	+16·5	+15·2	+10·1	+3·2	+2·0	+2·9	+1·9	-1·1	-0·2
May	-3·9	-3·2	-6·2	-12·9	-18·0	-22·0	-23·7	-23·0	-23·1	-19·2	-9·7	+3·3	+15·8	+23·8	+24·8	+22·8	+20·6	+17·9	+14·7	+12·3	+7·3	+1·3	+2·5	-2·3
June	+0·4	-2·1	-7·8	-10·1	-14·6	-19·6	-22·4	-24·5	-22·7	-18·9	-10·3	-2·3	+7·8	+13·6	+18·5	+20·5	+19·7	+19·1	+15·6	+12·6	+11·0	+7·6	+6·8	+1·8
July	-5·0	-5·8	-6·9	-8·9	-13·1	-21·6	-25·5	-26·1	-26·9	-21·9	-11·9	+1·2	+14·1	+24·5	+30·5	+29·5	+24·7	+17·9	+12·3	+9·6	+6·4	+3·0	-0·1	-0·1
Aug.	-2·9	-4·7	-6·3	-8·0	-9·5	-14·7	-19·1	-23·6	-25·5	-23·7	-10·7	+4·7	+19·0	+29·4	+28·3	+23·3	+16·4	+10·0	+5·7	+5·6	+4·3	+4·4	+0·9	-3·1
Sept.	-2·8	-6·5	-7·0	-7·7	-10·9	-13·7	-16·5	-21·1	-21·5	-15·8	-3·7	+10·7	+22·3	+27·6	+24·0	+14·7	+6·3	+4·0	+5·7	+7·1	+5·3	+0·8	-1·2	-0·1
Oct.	-2·9	-2·8	-5·4	-7·6	-5·9	-7·0	-9·2	-12·1	-14·2	-14·6	-7·7	+6·8	+14·5	+18·2	+19·2	+11·4	+7·6	+5·8	+6·4	+5·8	+2·7	-0·7	-2·1	-6·3
Nov.	-8·5	-5·8	-5·3	-6·4	-3·8	-2·8	-3·6	-3·4	-3·8	-5·1	-0·1	+6·0	+9·2	+9·7	+7·5	+6·9	+6·9	+6·4	+4·7	+3·9	+3·9	-5·1	-6·7	-4·6
Dec.	-7·1	-4·5	-3·0	-0·2	+0·3	-2·1	-1·0	-2·9	-3·6	-3·1	+1·9	+7·7	+10·9	+9·8	+9·7	+5·8	+5·8	+2·5	-0·4	-1·6	-3·9	-6·8	-8·5	-5·6
Year	-5·4	-5·3	-6·1	-7·2	-8·5	-10·5	-12·1	-14·3	-15·3	-13·3	-5·1	+5·2	+14·1	+18·8	+18·7	+14·9	+12·0	+9·1	+6·8	+5·2	+3·6	0·0	-2·0	-3·0
Winter	-8·3	-6·7	-6·8	-4·3	-3·3	-3·0	-2·5	-3·5	-3·5	-2·8	+1·8	+6·9	+10·7	+10·9	+9·7	+6·8	+6·6	+5·0	+3·9	+0·8	+0·1	-4·7	-6·9	-6·8
Equinox	-8·0	-5·3	-4·9	-7·4	-8·5	-9·1	-11·1	-15·3	-17·9	-16·1	-6·5	+6·9	+17·6	+22·9	+20·7	+13·9	+8·9	+5·9	+4·4	+4·9	+3·4	+0·5	-1·6	-1·3
Summer	-2·9	-3·9	-6·8	-10·0	-13·8	-19·5	-22·7	-24·3	-24·5	-20·9	-10·6	+1·7	+14·2	+22·9	+25·6	+24·0	+20·4	+16·3	+12·1	+10·0	+7·3	+4·0	+2·5	-0·9

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+3·4	+2·4	+1·6	+0·2	-1·0	-1·3	-1·6	-1·6	-2·8	-3·4	-2·8	-2·0	-1·2	+0·2	+1·0	+0·8	+1·2	+0·5	+0·6	+0·6	0·0	+0·6	+2·2	+2·4
Feb.	+1·4	-0·6	-1·4	-2·8	-4·0	-4·3	-5·8	-5·6	-5·6	-5·4	-6·4	-4·8	-2·4	-0·6	+0·4	+1·6	+3·0	+3·9	+5·6	+7·0	+7·0	+7·4	+7·0	+5·4
Mar.	-8·4	-6·1	-5·8	-3·8	-2·8	-1·7	+0·4	+2·4	+0·8	-1·7	-5·8	-8·4	-7·6	-3·3	+2·0	+5·4	+7·4	+8·1	+6·8	+4·8	+4·6	+5·7	+3·8	+3·2
Apr.	-0·8	-1·2	-1·1	-2·4	-0·2	-0·8	+0·2	-0·2	-1·5	-4·6	-6·0	-6·8	-8·2	-6·0	-1·7	-0·4	+2·2	+5·8	+7·6	+7·4	+6·5	+5·2	+5·2	+1·8
May	+1·2	-0·2	-0·8	-1·4	-0·8	-0·7	-0·2	-2·0	-4·0	-7·8	-11·6	-14·4	-13·6	-8·8	-3·0	+2·0	+4·8	+9·9	+13·2	+12·0	+10·4	+8·2	+5·4	+2·2
June	+0·2	-0·9	+1·0	+3·2	+4·2	+4·3	+2·6	+2·2	0·0	-4·3	-10·0	-10·8	-9·8	-7·1	-3·8	-1·8	+0·6	+2·5	+4·8	+6·6	+6·0	+4·9	+3·4	+2·0
July	+2·5	+3·4	+3·5	+4·0	+5·2	+5·7	+2·8	+1·4	+0·9	-3·4	-5·9	-9·6	-12·3	-9·8	-7·7	-3·8	+0·4	+4·3	+5·0	+4·6	+3·7	+4·2	+1·5	-0·6
Aug.	+4·2	+3·6	+2·0	+2·8	+4·2	+5·5	+5·0	+4·6	+2·6	-1·4	-6·4	-12·2	-16·4	-15·2	-7·2	-3·6	+1·6	+4·9	+5·0	+5·4	+3·8	+2·6	+2·4	+2·2
Sept.	+1·6	+2·5	+2·8	+1·9	+2·5	+2·6	+4·1	+3·3	+1·2	-1·5	-3·8	-7·9	-9·8	-7·5	-3·0	+0·1	+2·9	+2·0	+0·1	+0·1	+1·2	+1·3	+1·6	+1·7
Oct.	+1·3	0·0	-0·1	-0·1	0·0	-0·1	+0·9	+1·5	+0·8	-2·9	-6·1	-5·7	-2·6	+0·3	+3·5	+1·2	+0·3	+0·1	+0·3	+1·6	+1·5	+0·9		
Nov.	+0·3	0·0	-1·4	-1·5	-1·6	-2·6	-3·1	-3·8	-3·0	-1·3	-2·0	-2·0	-1·1	+0·4	+2·8	+3·3	+1·8	+0·8	+0·3	+0·4	+0·6	+4·5	+5·0	+3·2
Dec.	+1·5	+1·3	0·0	-0·3	-0·9	-1·1	-1·5	-2·3	-2·8	-4·1	-5·5	-4·5	-4·1	-1·3	+1·0	+4·1	+3·9	+3·9	+3·9	+2·9	+2·4	+2·7	+1·5	-0·7
Year	+0·7	+0·3	0·0	0·0	+0·4	+0·5	+0·2	-0·1	-1·1	-3·2	-5·8	-7·5	-7·7	-5·1	-1·6	+0·9	+2·8	+4·0	+4·4	+4·3	+3·9	+4·1	+3·4	+2·0
Winter	+1·7	+0·8	-0·3	-1·1	-1·9	-2·3	-3·0	-3·3	-3·5	-3·5	-4·2	-3·3	-2·2	-0·3	+1·3	+2·5	+2·5	+2·3	+2·6	+2·7	+2·5	+3·8	+3·9	+2·6
Equinox	-1·6	-1·2	-1·1	-1·1	-0·1	0·0	+1·1	+1·6	+0·5	-1·7	-4·6	-7·3	-7·8	-4·9	-0·6	+2·1	+4·0	+4·3	+3·7	+3·1	+3·1	+3·5	+3·0	+1·9
Summer	+2·0	+1·5	+1·4	+2·1	+3·2	+3·7	+2·5	+1·5	-0·1	-4·2	-8·5	-11·7	-13·0	-10·2	-5·4	-1·8	+1·9	+5·4	+7·0	+7·1	+6·0	+5·0	+3·2	+1·5

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

153 ESKDALEMUIR 1941

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·26	-1·14	*-1·71*	-0·66	-0·92	-0·86	-0·98	-0·96	-0·69	-0·16	+0·58	+1·56	+2·38	*+2·58*	+1·85	+1·18	+0·88	+0·78	+0·76	+0·38	-0·11	-0·84	-1·24	-1·40
Feb.	-2·35	*-2·36*	-2·10	-1·55	-1 34	-0·96	-0·63	-0·98	-0·92	-0·29	+1·00	+2·02	*+3·09*	+2·88	+2·80	+1·99	+1·74	+1·32	+1·43	-0·58	+0·02	-0·77	-1·38	-2·08
Mar.	-2·35	-1·58	-0·68	-1·31	-1·96	-2·06	-2·05	-2·80	*-3·20*	-2·39	0·00	+2·88	+4·83	*+5·42*	+3·96	+2·63	+1·18	+0·54	+0·19	+0·48	+0·06	-0·47	-1·06	-0·26
Apr.	-1·10	-1·00	-1·11	-1·78	-1·94	-1·48	-2·02	-3·20	*-4·03*	-3·32	-1·02	+1·52	+4·04	*+5·24*	+4·73	+3·56	+2·82	+1·58	+0·02	-0·18	+0·01	-0·14	-0·72	-0·48
May	-0·97	-0·60	-1·11	-2·57	-3·85	-4·74	*-4·95*	-4·75	-4·55	-3·34	-1·07	+1·83	+4·31	*+5·64*	+5·61	+4·73	+3·83	+2·94	+2·09	+1·75	+0·89	-0·18	+0·09	-1·03
June	-0·21	-0·74	-1·85	-2·30	-3·32	-4·25	-4·58	*-4·78*	-4·21	-3·10	-1·09	+0·84	+2·75	+3·76	+4·39	*+4·54*	+3·70	+3·05	+2·26	+1·72	+1·57	+0·94	+0·93	-0·02
July	-1·36	-1·39	-1·64	-2·15	-3·07	-4·78	*-5·49*	-5·39	-5·18	-3·59	-1·12	+1·77	+4·42	+6·41	*+7·00*	+6·19	+4·77	+3·06	+1·71	+1·07	+0·42	-0·21	-0·78	-0·67
Aug.	-0·92	-1·31	-1·66	-1·88	-2·24	-3·21	-4·06	-4·68	*-4·76*	-3·93	-1·00	+2·42	+5·32	*+6·93*	+6·44	+5·00	+3·22	+1·61	+0·40	+0·24	+0·02	+0·01	-0·68	-1·28
Sept.	-0·98	-1·74	-1·76	-1·92	-2·48	-2·93	-3·40	*-4·12*	-3·92	-2·24	+0·70	+3·64	+5·58	*+6·20*	+5·12	+3·02	+1·14	+0·35	+0·56	+0·78	+0·48	-0·56	-0·88	-0·64
Oct.	-0·82	-0·72	-1·28	-1·84	-1·52	-1·77	-2·26	-2·60	*-2·62*	-2·12	-0·44	+2·50	+3·88	*+4·36*	+4·24	+2·42	+1·40	+1·07	+0·84	+0·64	+0·00	-0·64	-0·96	-1·76
Nov.	*-1·57*	-1·09	-1·07	-1·43	-0·95	-0·78	-0·93	-0·89	-0·87	-0·85	+0·45	+1·79	*+2·43*	+2·37	+1·75	+1·51	+1·37	+1·12	+0·69	+0·45	+0·35	-1·23	-1·49	-1·13
Dec.	-1·30	-0·75	-0·58	-0·05	-0·08	-0·67	-0·44	-0·79	-0·90	-0·63	+0·58	+1·77	*+2·38*	+2·11	+2·08	+1·45	+1·26	+0·53	-0·12	-0·41	-0·86	-1·41	*-1·88*	-1·29
Year	-1·27	-1·20	-1·38	-1·62	-1·97	-2·37	-2·65	*-2·99*	-2·99	-2·16	-0·20	+2·05	+3·78	*+4·49*	+4·16	+3·19	+2·28	+1·50	+0·90	+0·53	+0·24	-0·46	-0·84	-1·00
Winter	*-1·62*	-1·33	-1·37	-0·92	-0·82	-0·82	-0·75	-0·91	-0·85	-0·48	+0·65	+1·79	*+2·57*	+2·49	+2·12	+1·53	+1·31	+0·94	+0·69	-0·04	-0·15	-1·06	-1·50	-1·47
Equinox	-1·31	-1·26	-1·21	-1·71	-1·97	-2·06	-2·43	-3·18	*-3·44*	-2·52	-0·19	+2·63	+4·58	*+5·31*	+4·51	+2·91	+1·63	+0·89	+0·40	+0·43	+0·14	-0·45	-0·91	-0·79
Summer	-0·87	-1·01	-1·57	-2·23	-3·12	-4·25	-4·77	*-4·90*	-4·67	-3·49	-1·07	+1·71	+4·20	+5·69	*+5·86*	+5·11	+3·88	+2·67	+1·61	+1·19	+0·73	+0·14	-0·11	-0·75

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	*+0·46*	+0·31	+0·28	+0·21	-0·07	-0·17	-0·32	-0·26	-0·20	-0·15	+0·20	+0·32	+0·29	+0·13	-0·06	+0·15	-0·02	-0·20	*-0·33*	-0·33	-0·31	-0·31	+0·05	+0·32
Feb.	-0·17	-0·16	-0·03	-0·11	-0·35	-0·44	*-0·49*	-0·44	-0·37	+0·23	+0·21	+0·37	*+0·49*	+0·37	+0·10	0·00	-0·30	-0·03	+0·22	+0·01	+0·27	+0·28	+0·22	+0·11
Mar.	-0·46	+0·02	-0·18	-0·05	-0·39	-0·22	-0·12	+0·05	+0·40	+1·15	*+1·28*	+1·16	+0·65	+0·33	+0·14	-0·09	-0·12	-0·12	-0·24	-0·57	-0·58	-0·54	*-0·80*	-0·71
Apr.	-0·30	-0·32	-0·32	-0·21	-0·05	-0·15	+0·01	+0·01	+0·21	+0·91	+1·43	*+1·66*	+1·36	+0·64	+0·23	+0·04	-0·56	-0·67	*-0·77*	-0·69	-0·69	-0·64	-0·57	-0·58
May	-0·17	+0·10	+0·28	+0·21	-0·03	-0·09	+0·13	+0·17	+0·43	+0·89	+1·12	*+1·26*	+1·00	+0·59	+0·38	-0·13	-0·69	-1·01	*-1·17*	-0·93	-0·69	-0·43	-0·51	-0·71
June	-0·43	-0·45	-0·25	-0·14	-0·19	0·00	+0·33	+0·67	+0·91	+1·20	+1·33	*+1·62*	+1·29	+1·04	+0·55	+0·21	-0·70	*-1·41*	-1·39	-1·22	-0·96	-0·85	-0·64	-0·52
July	-0·35	-0·15	-0·14	-0·25	-0·26	-0·10	+0·02	+0·31	+0·83	+1·49	+1·88	*+1·92*	+1·71	+1·44	+0·50	-0·26	-0·72	-0·99	-1·20	*-1·29*	-1·27	-1·12	-1·04	-0·96
Aug.	-0·33	-0·36	-0·39	-0·17	-0·19	+0·04	+0·17	+0·63	+1·04	+1·59	+1·68	*+1·71*	+1·39	+0·56	+0·38	-0·05	-0·37	-0·63	-1·05	-1·22	-1·18	*-1·25*	-1·17	-0·83
Sept.	-0·50	-0·44	-0·31	-0·34	-0·15	+0·06	+0·29	+0·63	+1·01	+1·58	*+2·04*	+1·73	+0·92	+0·26	-0·09	-0·17	-0·23	-0·68	-0·94	*-1·05*	-0·89	-1·02	-0·85	-0·85
Oct.	-0·26	-0·17	-0·18	-0·30	-0·38	-0·40	-0·43	-0·01	+0·64	+1·45	*+1·65*	+1·33	+0·99	+0·61	+0·20	+0·07	-0·22	-0·22	-0·75	*-0·86*	-0·81	-0·66	-0·70	-0·59
Nov.	+0·37	+0·22	+0·04	-0·15	-0·23	-0·33	-0·32	-0·32	-0·15	+0·31	+0·61	*+0·68*	+0·65	+0·43	+0·29	+0·15	-0·10	-0·34	-0·42	-0·53	*-0·67*	-0·08	+0·04	-0·14
Dec.	+0·33	+0·32	+0·09	-0·01	-0·23	-0·34	*-0·35*	-0·29	-0·27	-0·04	+0·12	+0·08	-0·02	0·00	+0·05	*+0·42*	+0·14	+0·08	+0·04	-0·03	+0·01	+0·11	-0·04	-0·16
Year	-0·15	-0·09	-0·09	-0·11	-0·21	-0·18	-0·09	+0·10	+0·37	+0·89	+1·13	*+1·15*	+0·89	+0·53	+0·22	+0·03	-0·32	-0·52	-0·67	*-0·73*	-0·64	-0·54	-0·50	-0·47
Winter	+0·25	+0·17	+0·09	-0·01	-0·22	-0·32	*-0·37*	-0·33	-0·25	+0·09	+0·28	*+0·36*	+0·36	+0·24	+0·09	+0·18	-0·07	-0·13	-0·13	-0·22	-0·17	0·00	+0·07	+0·04
Equinox	-0·38	-0·23	-0·25	-0·22	-0·24	-0·17	-0·07	+0·17	+0·57	+1·27	*+1·60*	+1·47	+0·98	+0·46	+0·12	-0·04	-0·29	-0·43	-0·68	*-0·79*	-0·75	-0·71	-0·73	-0·68
Summer	-0·32	-0·21	-0·13	-0 09	-0·17	-0·04	+0·16	+0·44	+0·81	+1·29	+1·50	*+1·63*	+1·35	+0·91	+0·45	-0·06	-0·62	-1·01	*-1·21*	-1·17	-1·02	-0·91	-0·84	-0·75

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	*-5·6*	-3·7	-3·6	-3·1	+0·6	+2·1	+4·2	+3·3	+2·0	+0·9	-4·0	-5·5	-4·8	-1·9	+1·2	-1·9	+0·8	+3·1	*+5·2*	+5·1	+4·6	+4·9	0·0	-3·9
Feb.	+3·0	+2·1	-0·1	+0·6	+3·7	+4·9	+5·2	+4·5	+3·5	-5·4	-5·5	-7·3	*-8·2*	-5·7	-1·3	+0·6	*+5·5*	+1·9	-1·2	-2·5	-1·5	-1·4	-0·7	+0·3
Mar.	+3·7	-2·5	+0·5	-0·7	+4·7	+2·6	+1·9	+0·1	-5·7	-17·7	*-21·1*	-20·3	-12·5	-6·1	-1·3	+3·3	+4·5	+4·8	+6·1	+10·3	+10·3	+10·1	*+13·3*	+11·7
Apr.	+4·2	+4·3	+4·3	+2·2	+0·7	+1·9	0·0	-0·3	-3·7	-15·2	-23·5	*-27·1*	-23·2	-11·7	-4·1	-0·8	+9·1	+12·1	*+14·2*	+12·9	+12·7	+11·4	+10·3	+9·3
May	+2·9	-1·6	-4·5	-3·6	+0·2	+1·1	-2·0	-3·2	-7·9	-16·0	-20·9	*-24·0*	-19·9	-12·0	-6·7	+2·6	+12·0	+18·7	*+22·2*	+18·2	+14·1	+9·4	+9·5	+11·4
June	+6·4	+6·4	+4·1	+3·2	+4·4	+1·6	-4·0	-9·2	-13·5	-19·4	-23·4	*-28·0*	-22·8	-18·0	-9·5	-3·8	+10·6	+21·8	*+22·4*	+20·6	+16·5	+14·4	+10·8	+8·4
July	+6·1	+3·4	+3·4	+5·1	+5·8	+3·6	+0·7	-4·0	-12·0	-23·3	-30·0	*-32·0*	-29·9	-25·0	-10·2	+2·5	+10·8	+16·2	+19·7	*+20·8*	+20·2	+18·1	+16·0	+14·0
Aug.	+6·5	+6·7	+6·5	+3·5	+4·3	+1·4	-0·7	-7·7	-14·5	-24·1	-27·3	*-29·9*	-26·7	-13·9	-8·3	-0·5	+6·1	+11·2	+17·5	*+20·1*	+18·9	+19·5	+18·3	+13·1
Sept.	+8·0	+7·4	+5·7	+5·8	+3·2	0·0	-2·8	-8·2	-14·5	-24·0	*-31·6*	-28·6	-17·2	-6·6	+0·3	+2·6	+4·4	+10·8	+14·0	*+15·6*	+13·7	*+15·6*	+13·2	+13·2
Oct.	+4·3	+2·6	+2·7	+4·4	+5·6	+5·9	+6·4	+0·4	-8·9	-21·2	*-25·5*	-22·0	-16·7	-10·0	-2·9	+0·2	+4·6	+3·7	+11·2	*+12·8*	+12·1	+10·4	+10·9	+9·0
Nov.	-5·4	-3·2	-1·1	+1·6	+2·8	+4·0	+3·6	+3·4	+1·1	-5·0	-9·8	*-10·8*	-10·0	-6·2	-3·3	-1·0	+2·2	+5·4	+6·4	+8·0	*+10·1*	+2·8	+1·2	+3·2
Dec.	-4·4	-4·3	-1·4	+0·1	+3·1	+4·6	*+4·7*	+3·5	+3·0	-0·9	-3·6	-2·9	-1·2	-0·5	-0·4	*-4·7*	-0·7	+0·2	+0·9	+1·5	+0·8	-0·7	+1·2	+2·1
Year	+2·5	+1·5	+1·4	+1·6	+3·3	+2·8	+1·4	-1·5	-5·9	-14·3	-18·9	*-19·9*	-16·1	-9·8	-3·9	-0·1	+5·8	+9·2	+11·5	*+12·4*	+11·0	+9·5	+8·7	+7·7
Winter	-3·1	-2·3	-1·5	-0·2	+2·5	+3·9	*+4·4*	+3·7	+2·4	-2·6	-5·7	*-6·6*	-6·1	-3·6	-0·9	-1·7	+1·9	+2·7	+2·8	+4·3	+3·5	+1·4	+0·4	+0·4
Equinox	+5·1	+2·9	+3·3	+2·9	+3·5	+2·6	+1·4	-2·0	-8·2	-19·5	*-25·4*	-24·5	-17·4	-8·6	-2·0	+1·3	+5·7	+7·9	+11·4	*+12·9*	+12·2	+11·9	+11·9	+10·8
Summer	+5·5	+3·7	+2·4	+2·1	+3·7	+1·9	-1·5	-6·0	-12·0	-20·7	-25·4	*-28·5*	-24·8	-17·2	-8·7	+0·2	+9·9	+17·0	*+20·5*	+19·9	+17·4	+15·3	+13·7	+11·7

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

154 ESKDALEMUIR 1941

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+7·6	+6·7	+5·7	+2·8	+7·6	+15·0	+14·5	+11·1	+6·0	+2·2	−8·2	−6·0	−9·9	−14·1	−4·7	−10·2	−15·2	−4·5	*−15·7*	−2·3	−5·0	+1·8	−0·7	*+15·5*
Feb.	+7·2	+5·0	+1·9	+0·7	+8·8	*+17·3*	+14·3	+10·9	+6·0	−6·6	−14·2	−9·4	−9·1	−15·0	*−17·1*	−1·5	+2·9	−7·6	−1·0	+0·7	+12·1	+1·5	−6·1	−1·7
Mar.	−5·2	−50·5	−8·8	−10·9	+15·5	+17·6	−11·1	−4·8	−25·8	−49·0	*−55·6*	−53·3	−11·4	+32·6	+100·8	+46·5	+24·3	*+133·7*	+50·9	+10·4	−0·7	−37·5	−55·0	−52·8
Apr.	+9·5	+1·3	+12·8	+9·0	+8·7	−3·7	−0·5	−12·5	−16·0	−32·1	*−38·4*	−33·9	−27·9	−16·5	−12·0	+12·9	+28·0	*+30·1*	+28·2	+27·1	+2·5	+9·5	+6·2	+7·7
May	+9·5	+8·0	+4·1	+4·3	+3·0	−4·3	−14·9	−29·8	−28·1	*−30·2*	−26·8	−27·3	−23·1	−17·2	−8·6	+5·2	+12·4	+27·4	*+37·8*	+32·4	+31·4	+16·2	+8·5	+10·1
June	+12·2	+9·0	+14·6	+11·2	+8·5	+2·5	−5·8	−21·0	−28·8	*−46·3*	−39·6	−32·8	−28·2	−20·1	−0·7	+1·5	+20·6	+19·6	+31·1	*+35·8*	+20·9	+14·8	+15·4	+5·8
July	+5·5	+0·5	−13·9	−15·4	−2·7	+8·4	−43·8	−71·3	*−104·7*	−81·0	−69·1	−60·3	−86·5	+69·1	*+110·4*	+101·3	+5·3	+20·1	+29·0	+21·8	+15·1	−2·4	−6·1	−2·4
Aug.	+0·2	+6·5	+13·3	+25·0	+7·9	+19·1	+3·6	−15·8	−38·2	−53·7	*−62·9*	−49·4	−37·3	−9·2	+40·0	+42·2	*+50·5*	+48·6	+27·6	+19·8	+5·2	−6·0	−8·5	−28·5
Sept.	−92·3	−72·7	−64·2	−51·1	−52·4	−34·7	−24·8	−16·6	−11·1	+5·6	+5·2	+10·7	+70·3	+141·7	+89·3	+152·8	*+166·0*	+106·8	+71·1	−85·8	*−122·0*	−88·6	−61·9	−41·4
Oct.	+17·4	+14·1	+9·6	+17·8	*+28·7*	+21·3	+5·7	+3·2	−4·6	−9·3	−21·2	*−24·9*	−14·9	−14·0	−7·8	+2·5	+9·6	+4·4	−4·2	+1·0	−1·1	−3·9	−17·5	−11·7
Nov.	−6·0	−14·0	−1·5	+33·3	*+35·3*	+10·7	+1·0	−13·5	−18·6	*−21·9*	−18·2	−11·2	−10·1	−12·7	+5·1	+5·1	+8·8	−10·9	+11·1	−2·1	+1·3	+5·2	+6·5	+17·3
Dec.	+4·1	−0·9	+1·2	−4·8	+1·1	+2·1	+3·8	+3·2	−0·1	−0·8	−7·7	−2·7	−4·4	+0·5	*+27·0*	+26·5	+7·5	−9·7	−10·3	−9·7	−3·6	*−13·6*	−5·8	−3·0
Year	−2·5	−7·2	−2·1	+1·7	+6·0	+5·9	−4·8	−13·0	−22·0	−26·9	*−29·7*	−25·0	−1·6	+10·5	+26·8	*+32·0*	+26·8	+29·8	+21·3	+4·0	−3·6	−8·6	−10·5	−7·1
Winter	+3·3	−0·8	+1·9	+7·7	*+13·6*	+11·3	+8·4	+2·9	−1·7	−6·8	*−12·1*	−7·3	−8·4	−10·3	+2·5	+5·0	+1·0	−8·1	−4·0	−3·3	+1·2	−1·3	−1·5	+7·0
Equinox	−17·6	−27·0	−12·7	−8·9	+0·1	+0·1	−7·7	−7·7	−14·4	−21·2	−27·5	−25·4	+4·0	+36·0	+42·5	+53·6	+56·9	*+68·8*	+36·5	−11·8	−30·3	−30·1	*−32·1*	−24·5
Summer	+6·8	+6·0	+4·5	+6·3	+4·2	+6·5	−15·2	−34·4	−49·9	*−52·8*	−49·6	−42·5	−0·5	+5·7	+35·3	*+37·5*	+22·2	+28·9	+31·4	+27·4	+18·2	+5·7	+2·3	−3·8

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2·3	+4·4	−12·5	+2·7	+10·2	+6·6	+8·7	+12·2	+7·7	+15·2	+7·8	+14·1	+21·4	*+21·7*	+17·9	+19·8	−7·5	*−30·3*	−15·1	−28·1	−17·6	−19·1	−27·0	−15·5
Feb.	−0·9	−14·4	−2·1	+5·3	−1·0	+4·7	+7·4	+9·3	+11·5	+10·4	+14·5	+19·2	+29·7	*+32·7*	+26·6	+17·0	−9·0	−19·3	−23·3	−9·1	−19·9	−32·9	*−35·0*	−21·6
Mar.	−17·2	−42·7	−36·5	−20·4	+12·4	+8·8	+9·9	+4·4	−9·2	−11·2	+12·3	+22·8	+39·1	+43·8	+39·2	+35·1	+13·5	*+54·7*	+28·1	−13·8	−39·4	−36·8	−36·5	*−60·5*
Apr.	−12·1	−8·8	−9·3	−10·5	−7·3	+6·5	+12·9	−5·5	−13·4	−12·5	−1·7	+9·3	+25·1	*+38·5*	+34·3	+33·5	+23·8	+25·8	−13·9	−8·9	−17·4	−24·1	*−34·5*	−29·9
May	−11·2	−16·3	−23·6	−20·6	−6·9	−3·5	−6·8	−13·2	−18·4	−14·3	−3·8	+9·1	+22·2	+26·8	+29·3	*+31·2*	+27·4	+29·1	+22·3	+11·7	−6·0	−13·3	−29·2	−21·8
June	−15·1	−24·1	*−32·6*	−28·9	−24·5	−25·1	−23·6	−25·7	−19·3	−13·9	−1·8	+9·0	+22·3	+32·3	+34·6	*+40·3*	+36·6	+28·4	+26·2	+18·3	+7·2	+0·2	−6·3	−14·5
July	+0·2	−6·7	+8·0	−20·7	−5·4	−3·1	+6·0	−17·6	*−55·6*	−20·5	−28·9	−37·9	−8·2	+8·9	+23·2	+30·6	+23·5	+28·5	*+32·3*	+19·7	+4·1	+11·4	+5·0	+3·3
Aug.	−8·7	−2·1	−6·9	−12·9	−10·9	−15·1	−13·6	−19·3	−18·8	−2·2	+3·9	+14·1	+27·4	+41·1	*+49·6*	+36·7	+37·3	+12·9	−0·2	−9·0	−16·4	−17·4	*−37·3*	−31·9
Sept.	−65·8	−60·9	−69·7	−58·7	−53·9	−6·7	−0·9	+9·9	+4·7	+13·3	+4·2	+2·4	+48·9	+71·4	+70·2	+80·5	*+82·7*	+67·4	+29·9	−12·1	−36·2	−47·9	−0·8	*−71·8*
Oct.	−12·1	−8·4	−8·5	+5·3	−5·9	−7·0	+1·4	+5·5	−2·8	−11·7	−3·8	+9·8	+23·7	+34·3	*+35·0*	+33·0	+31·5	+24·2	−5·4	+5·9	−22·6	*−43·7*	−36·5	−41·4
Nov.	*−34·8*	−25·6	−32·5	−23·5	+0·5	+10·3	*+30·4*	+24·8	+4·4	+9·1	+10·4	+12·9	+21·7	+28·4	+18·0	+19·6	+23·9	+4·3	−20·3	−18·3	−20·3	−23·6	−9·2	−10·6
Dec.	−16·8	−19·9	−17·4	−5·5	+0·2	−2·2	−2·9	−0·1	+5·3	+7·6	+7·4	+17·8	+21·6	+26·1	*+29·7*	+27·2	+14·2	−6·1	−0·3	−18·0	−13·6	*−25·3*	−18·4	−10·6
Year	−16·0	−18·8	−20·3	−15·7	−7·7	−2·1	+2·4	−1·2	−8·6	−2·5	+1·7	+8·6	+24·6	+33·9	*+34·0*	+33·7	+24·9	+18·3	+5·0	−5·2	−16·5	−22·7	−22·1	*−27·3*
Winter	−12·5	−13·9	−16·1	−5·3	+2·5	+4·9	+10·9	+11·5	+7·2	+10·6	+10·0	+16·0	+23·6	*+27·3*	+23·1	+20·9	+5·4	−12·8	−14·7	−18·4	−17·9	*−25·2*	−22·5	−14·5
Equinox	−26·8	−30·2	−31·0	−21·1	−13·7	+0·4	+5·8	+3·6	−5·2	−5·5	+2·8	+11·0	+34·2	*+47·0*	+44·7	+45·8	+37·9	+43·0	+9·7	−7·2	−28·9	−38·1	−27·1	*−50·9*
Summer	−8·7	−12·3	−13·7	−20·8	−11·9	−11·7	−9·5	−18·9	*−28·0*	−12·7	−7·7	−1·4	+15·9	+27·3	+34·2	*+34·7*	+31·2	+24·7	+20·2	+10·1	−2·8	−4·8	−17·0	−16·3

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−23·9	*−30·0*	−24·6	−20·5	−22·8	−21·8	−16·9	−15·6	−12·4	−10·9	−7·0	−4·8	−1·3	+7·8	+11·6	+20·5	+51·6	*+56·4*	+37·7	+26·2	+17·8	+3·3	−1·8	−18·6
Feb.	−20·6	−23·4	−23·2	−20·2	−15·4	−15·1	−16·0	−12·6	−10·8	−7·6	−4·4	−4·4	+0·4	+8·8	+21·0	+30·8	+42·2	*+43·5*	+30·8	+22·8	+8·6	+0·4	−10·8	*−24·8*
Mar.	−28·3	*−72·0*	−61·9	−39·7	−32·5	−27·4	−19·7	−12·5	+3·5	+17·6	+31·3	+39·7	+36·3	+59·2	−9·1	−37·1	−13·3	−28·8	+45·1	*+69·3*	+61·5	+28·2	+12·3	−21·7
Apr.	−10·8	−19·1	−19·0	−19·1	−17·5	−24·2	−27·9	−21·3	−15·2	−11·7	−11·2	−11·9	−12·2	−4·1	+24·4	+30·9	+44·7	*+47·4*	+45·3	+30·9	+22·0	+13·9	−12·0	−22·3
May	−7·2	−21·7	−21·8	−27·7	−25·4	*−32·1*	−24·4	−16·5	−13·0	−7·7	−6·8	−2·9	+2·0	+15·1	+22·0	+22·1	+23·4	+26·1	*+28·2*	+27·9	*+28·2*	+13·9	+1·6	−3·3
June	−14·1	−17·8	*−25·9*	−23·8	−18·6	−13·7	−9·4	−6·0	−8·1	−7·4	−8·7	−9·2	−4·1	0·0	+7·1	+13·6	+18·2	+27·3	*+30·4*	+27·0	+23·1	+16·2	+5·3	−1·4
July	−21·6	−39·9	*−79·1*	−75·0	−56·3	−37·9	−48·0	−59·9	−37·5	−23·8	+23·5	+62·9	+31·2	+52·1	*+63·9*	+63·4	+40·5	+31·5	+31·4	+34·3	+29·7	+8·8	+2·1	+3·7
Aug.	−40·8	*−58·6*	−50·9	−36·4	−35·6	−46·6	−34·6	−26·2	−22·1	−22·6	−19·6	−11·2	+4·4	+22·4	+68·3	+73·2	+81·2	*+83·6*	+69·0	+53·8	+24·9	−4·4	−29·2	−42·0
Sept.	−94·4	+61·1	−81·6	−107·4	*−125·4*	−117·9	−43·6	−30·8	−6·0	+11·7	+26·2	+31·8	+66·4	+88·5	*+93·4*	+65·6	+76·2	+64·3	+35·0	+26·8	+12·2	+14·1	−29·6	−36·6
Oct.	−20·7	−18·1	−19·2	−29·5	−27·3	−22·5	−20·9	−17·1	−9·8	−4·9	−5·7	−4·3	−1·3	+3·9	+7·6	+14·1	+26·5	+59·7	*+70·9*	+56·3	+37·0	+3·1	−29·3	*−48·5*
Nov.	−35·4	−49·3	−40·9	−45·2	*−61·3*	−60·1	−54·0	−37·3	−19·5	−8·8	−1·1	+12·5	+23·6	+36·9	+25·9	+49·6	+59·7	*+60·3*	+58·8	+45·1	+30·1	+13·0	+1·5	−4·1
Dec.	−27·6	−20·1	−24·6	−32·9	*−34·4*	−30·1	−19·4	−15·5	−14·4	−13·1	−8·6	−4·9	−2·4	+6·1	+39·2	*+67·7*	+61·4	+42·9	+33·8	+23·7	+9·0	−8·5	−7·6	−19·7
Year	−28·8	−25·7	−39·4	*−39·8*	−39·4	−37·5	−27·9	−22·6	−13·8	−7·4	+0·7	+7·8	+11·9	+24·7	+31·3	+34·5	+42·7	+42·9	*+43·0*	+37·0	+25·3	+8·5	−8·1	−19·9
Winter	−26·9	−30·7	−28·3	−29·7	*−33·5*	−31·8	−26·6	−20·3	−14·3	−10·1	−5·3	−0·4	+5·1	+14·9	+24·4	+42·1	*+53·7*	+50·8	+40·3	+29·5	+16·4	+2·1	−4·7	−16·8
Equinox	−38·5	−12·0	−45·4	−48·9	*−50·7*	−48·0	−28·0	−20·4	−6·9	+3·2	+10·1	+13·8	+22·3	+36·9	+29·1	+18·4	+33·5	+35·7	*+49·1*	+45·8	+33·2	+14·8	−14·7	−32·3
Summer	−20·9	−34·5	*−44·4*	−40·7	−34·0	−32·6	−29·1	−27·1	−20·2	−15·4	−2·9	+9·9	+8·4	+22·4	+40·3	*+43·1*	+40·8	+42·1	+39·7	+35·7	+26·5	+8·6	−5·1	−10·7

DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS, DECLINATION, INCLINATION, AND HORIZONTAL FORCE

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

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DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·12	+0·59	−2·80	+0·41	+1·71	+0·64	+1·09	+1·97	+1·28	+2·99	+1·96	+3·15	+4·80	*+5·05*	+3·86	+4·49	−0·81	*−5·94*	−2·33	−5·61	−3·34	−3·95	−5·46	−3·87
Feb.	−0·51	−3·16	−0·51	+1·12	−0·68	+0·15	+0·84	+1·38	+2·07	+2·42	+3·61	+4·34	+6·45	*+7·34*	+6·19	+3·52	−1·96	−3·57	−4·68	−1·88	−4·61	−6·74	*−6·83*	−4·30
Mar.	−3·26	−6·34	−7·01	−3·64	*+1·80*	+0·98	+2·52	+1·12	−0·67	0·00	+5·06	+7·10	*+8·48*	+7·40	+3·31	+4·98	+1·62	+4·92	+3·36	−3·28	−7·97	−5·74	−4·88	*−9·86*
Apr.	−2·89	−1·85	−2·47	−2·55	−1·89	+1·50	+2·65	−0·53	−1·99	−1·05	+1·43	+3·45	+6·39	*+8·59*	+7·53	+6·21	+3·53	+3·84	−4·13	−3·07	−3·65	−5·33	*−7·29*	−6·43
May	−2·71	−3·67	−4·99	−4·39	−1·55	−0·52	−0·69	−1·31	−2·43	−1·51	+0·47	+3·11	+5·57	+6·23	*+6·35*	+6·09	+4·99	+4·64	+2·79	+0·87	−2·67	−3·45	*−6·33*	−4·89
June	−3·64	−5·31	*−7·30*	−6·38	−5·36	−5·21	−4·52	−4·24	−2·58	−0·69	+1·46	+3·34	+5·84	+7·49	+7·06	*+8·12*	+6·48	+4·87	+3·88	+2·06	+0·50	−0·65	−2·00	−3·22
July	−0·22	−1·39	+2·27	−3·50	−0·97	−1·01	+3·24	−0·29	*−6·47*	−0·44	−2·69	−4·93	−5·66	−1·37	−0·37	+1·56	+4·53	+4·87	*+5·22*	+2·99	+0·15	+2·42	+1·29	+0·77
Aug.	−1·78	−0·73	−2·02	−3·77	−2·59	−3·96	−2·93	−3·19	−2·06	+2·03	+3·68	+5·15	+7·28	*+8·77*	+8·24	+5·51	+5·25	+0·38	−1·31	−2·73	−3·58	−3·27	*−7·20*	−5·17
Sept.	−9·18	−9·09	−11·28	−9·63	−8·59	+0·24	+0·97	+2·79	+1·48	+2·45	+0·62	−0·01	+6·74	+8·05	*+10·22*	+9·39	+9·23	+8·84	+2·83	+1·49	−1·78	−5·71	+2·68	*−12·75*
Oct.	−3·25	−2·35	−2·16	+0·25	−2·51	−2·41	+0·03	+0·97	−0·36	−1·95	+0·21	+3·13	+5·51	*+7·61*	+7·48	+6·59	+5·97	+4·71	−0·91	+1·15	−4·54	*−8·69*	−6·61	−7·87
Nov.	*−6·79*	−4·56	−6·53	−6·32	−1·52	+1·61	+6·14	+5·66	+1·75	+2·86	+2·95	+3·14	+4·87	*+6·36*	+3·43	+3·74	+4·44	+1·37	−4·64	−3·62	−4·19	−5·04	−2·17	−2·94
Dec.	−3·60	−4·00	−3·59	−0·90	0·00	−0·54	−0·76	−0·16	+1·07	+1·58	+1·86	+3·74	+4·60	*+5·28*	+4·81	+4·32	+2·54	−0·80	+0·40	−3·22	−2·61	*−4·52*	−3·48	−2·02
Year	−3·14	−3·49	−4·03	−3·27	−1·85	−0·71	+0·71	+0·35	−0·74	+0·72	+1·72	+2·89	+5·07	*+6·40*	+5·68	+5·38	+3·82	+2·34	+0·04	−1·24	−3·19	−4·22	−4·02	*−5·21*
Winter	−2·69	−2·78	−3·36	−1·42	−0·12	+0·47	+1·83	+2·21	+1·54	+2·46	+2·59	+3·59	+5·18	*+6·01*	+4·57	+4·02	+1·05	−2·23	−2·81	−3·58	−3·69	*−5·06*	−4·49	−3·28
Equinox	−4·65	−4·91	−5·73	−3·89	−2·80	+0·08	+1·54	+1·09	−0·39	−0·14	+1·83	+3·42	+6·78	*+7·91*	+7·13	+6·79	+5·09	+5·58	+0·29	−0·93	−4·49	−6·37	−4·03	*−9·23*
Summer	−2·09	−2·77	−3·01	*−4·51*	−2·62	−2·67	−1·23	−2·26	−3·39	−0·15	+0·73	+1·67	+3·26	+5·28	*+5·32*	*+5·32*	+5·31	+3·69	+2·65	+0·80	−1·40	−1·24	−3·56	−3·13

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·13	−1·25	−0·80	−0·73	−1·22	*−1·63*	−1·50	−1·30	−0·82	−0·64	+0·25	+0·06	+0·30	+0·79	+0·33	+0·88	*+2·39*	+2·15	+2·19	+1·22	+1·03	+0·25	+0·41	−1·25
Feb.	−0·97	−0·69	−0·67	−0·53	−1·04	*−1·58*	−1·45	−1·17	−0·83	+0·09	+0·61	+0·22	+0·16	+0·71	+1·25	+0·61	+0·99	*+1·87*	+1·18	+0·65	−0·29	+0·41	+0·66	−0·18
Mar.	−0·10	+2·17	−0·42	+0·03	−2·01	−1·97	+0·10	−0·06	+1·92	+3·83	+4·25	+4·15	+1·07	−1·33	−7·44	−4·50	−2·13	*−10·32*	−2·65	+1·24	+2·16	+3·71	*+4·46*	+3·84
Apr.	−0·71	−0·43	−1·17	−0·91	−0·89	−0·46	−0·85	+0·37	+0·88	+2·01	*+2·27*	+1·79	+1·15	+0·40	+0·87	−0·58	−1·09	*−1·19*	−0·52	−0·88	+0·64	+0·08	−0·19	−0·61
May	−0·64	−0·82	−0·45	−0·66	−0·72	−0·46	+0·47	+1·75	+1·80	*+2·01*	+1·65	+1·59	+1·24	+1·10	+0·67	−0·26	−0·65	−1·59	*−2·12*	−1·61	−1·28	−0·52	−0·08	−0·42
June	−0·92	−0·67	−1·11	−0·89	−0·65	−0·12	+0·50	+1·62	+1·98	*+3·07*	+2·41	+1·79	+1·41	+0·84	−0·30	−0·37	−1·45	−1·03	−1·68	*−1·96*	−0·91	−0·57	−0·79	−0·20
July	−0·90	−0·92	−1·17	−0·54	−1·14	−1·45	+1·60	+3·46	*+6·78*	+5·05	+5·56	+6·09	−4·79	−3·39	*−6·02*	−5·55	+0·30	−0·97	−1·61	−0·87	−0·31	+0·21	+0·38	+0·20
Aug.	−0·90	−1·85	−2·03	*−2·35*	−1·24	−2·19	−0·89	+0·68	+2·24	+3·01	*+3·59*	+2·76	+2·15	+0·55	−1·68	−1·51	−1·86	−1·32	−0·10	+0·17	+0·52	+0·55	+0·39	+1·31
Sept.	+4·71	+7·20	+3·23	+1·57	+1·14	−0·55	+0·56	+0·18	+0·51	−0·28	+0·25	+0·05	−3·71	−8·19	−4·60	−9·61	*−10·25*	−6·43	−4·25	+6·49	*+8·86*	+6·89	+3·35	+2·88
Oct.	−1·48	−1·25	−0·98	−1·98	*−2·48*	−1·85	−0·92	−0·71	+0·10	+0·67	+1·31	+1·38	+0·59	+0·51	+0·18	−0·30	−0·44	+0·83	+2·11	+1·24	+1·33	+0·99	+0·97	+0·18
Nov.	+0·03	+0·08	−0·43	−2·96	*−3·85*	−2·35	−1·86	−0·41	+0·67	+1·08	+1·02	+0·86	+0·93	+1·33	+0·03	+0·60	+0·54	*+2·15*	+1·03	+1·53	+0·96	+0·33	−0·25	−1·08
Dec.	−0·70	−0·14	−0·43	−0·42	−0·93	−0·85	−0·69	−0·59	−0·43	−0·39	+0·19	−0·21	−0·09	−0·27	*−1·25*	−0·47	+0·81	*+1·79*	+1·52	+1·50	+0·66	+1·06	+0·47	−0·13
Year	−0·31	−0·12	−0·54	−0·87	−1·25	−1·29	−0·41	+0·32	+1·23	+1·62	*+1·95*	+1·71	+0·03	−0·58	−1·49	*−1·75*	−1·07	−1·17	−0·41	+0·73	+1·11	+1·11	+0·82	+0·38
Winter	−0·69	−0·50	−0·58	−1·16	*−1·76*	−1·61	−1·37	−0·87	−0·35	+0·04	+0·52	+0·23	+0·32	+0·64	+0·09	+0·40	+1·18	*+1·99*	+1·48	+1·22	+0·60	+0·52	+0·32	−0·66
Equinox	+0·60	+1·93	+0·17	−0·32	−1·06	−1·20	−0·28	−0·05	+0·85	+1·55	+2·02	+1·85	−0·22	−2·15	−2·74	−3·75	−3·48	*−4·28*	−1·32	+2·02	*+3·25*	+2·91	+2·15	+1·57
Summer	−0·83	−1·07	−1·19	−1·11	−0·94	−1·06	+0·42	+1·88	+3·20	+3·28	*+3·31*	+3·06	0·00	−0·23	−1·83	*−1·92*	−0·92	−1·23	−1·38	−1·07	−0·50	−0·09	−0·03	+0·23

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+7·9	+7·5	+2·8	+3·3	+9·7	*+16·1*	*+16·1*	+13·5	+7·6	+5·5	−6·3	−2·7	−4·9	−8·9	−0·6	−5·5	−16·5	−11·1	*−18·7*	−8·5	−8·8	−2·5	−6·7	+11·7
Feb.	+6·8	+1·7	+1·4	+0·5	+9·8	*+17·9*	+15·6	+12·7	+8·4	−4·1	−10·6	−4·9	−2·2	−7·3	−10·8	+2·3	+0·8	−11·7	−6·2	−1·3	+7·4	−5·9	*−13·8*	−6·5
Mar.	−8·9	−58·7	−16·6	−15·1	+17·9	+19·1	−8·7	−3·7	−27·2	−50·3	−51·5	−46·9	−2·5	+41·5	+107·0	+53·1	+26·7	*+142·5*	+55·9	+7·1	−9·4	−44·7	−61·7	*−64·9*
Apr.	+6·6	−0·7	+10·4	+6·4	+6·8	−2·1	+2·4	−13·4	−18·6	−34·1	*−37·8*	−31·0	−21·6	−7·5	−4·0	+20·0	+32·6	*+35·1*	+24·4	+24·4	−1·4	+3·9	−1·6	+0·8
May	+6·8	+4·2	−1·3	−0·4	+1·4	−5·0	−16·0	−32·0	−31·5	*−32·6*	−27·0	−24·6	−17·6	−10·8	−1·9	+12·0	+18·2	+33·2	*+41·8*	+34·2	+29·3	+12·8	+1·8	+5·0
June	+8·5	+3·4	+7·0	+4·5	+2·8	−3·2	−10·9	−26·2	−32·4	*−48·3*	−39·0	−30·0	−22·5	−12·4	+7·0	+10·5	+28·2	+25·4	+36·1	*+39·0*	+22·0	+14·5	+13·6	+2·4
July	+5·4	−1·0	−11·8	−19·6	−3·8	+7·5	−41·4	−73·4	*−114·4*	−83·6	−73·8	−67·2	+82·6	+69·4	*+112·8*	+105·6	+10·4	+25·9	+35·4	+25·6	+15·6	+0·2	−4·8	−1·6
Aug.	−1·7	+5·9	+11·4	+21·5	+5·3	+15·3	+0·5	−19·7	−41·4	−52·9	*−60·5*	−45·1	−30·3	+0·1	+50·0	+49·3	*+57·5*	+50·3	+26·9	+17·3	+1·4	−9·7	−16·5	−34·9
Sept.	−104·6	−84·4	−78·0	−62·8	−63·0	−35·3	−24·4	−14·0	−9·8	+8·4	+6·0	+11·0	+79·4	+154·0	+102·6	+166·8	*+180·2*	+119·1	+76·0	−86·4	*−127·0*	−97·0	−60·6	−56·2
Oct.	+14·3	+11·9	−7·5	+18·5	*+26·7*	+19·2	+5·9	+4·3	−5·1	−11·7	−21·5	−22·1	−9·3	−6·1	+0·1	+9·7	+16·3	+9·6	−5·3	+2·3	−6·1	−13·5	*−25·1*	−20·5
Nov.	−13·5	*−19·3*	−8·6	+27·3	*+34·5*	+12·7	+7·7	−7·7	−17·2	*−19·3*	−15·5	−8·1	−5·1	−6·1	+9·0	+9·3	+13·9	−9·7	+6·3	−6·1	−3·2	−0·1	+4·3	+14·5
Dec.	+0·3	−5·3	−2·7	−5·9	+1·1	+1·6	+3·1	+3·1	+1·1	+0·9	−5·9	+1·3	+0·5	+6·3	*+32·9*	+31·9	+10·5	−10·8	−10·1	−13·5	−6·5	*−18·9*	−9·7	−5·3
Year	−6·0	−11·2	−6·5	−1·8	+4·1	+5·3	−4·2	−13·0	−23·4	−26·8	*−28·6*	−22·5	+3·9	+17·7	+33·7	*+38·7*	+31·6	+33·1	+21·9	+2·8	−7·2	−13·4	−15·1	−13·0
Winter	+0·4	−3·9	−1·8	+6·3	*+13·8*	+12·1	+10·6	+5·4	0·0	−4·3	−9·6	−3·6	−2·9	−4·0	+7·6	+9·5	+2·2	*−10·8*	−7·2	−7·3	−2·8	−6·9	−6·5	+3·6
Equinox	−23·1	−33·0	−19·2	−13·3	−2·9	+0·2	−6·2	−6·7	−15·2	−21·9	−26·2	−22·3	+11·5	+45·5	+51·4	+62·4	+63·9	*+76·6*	+37·7	−13·1	−36·0	*−37·8*	−37·3	−35·2
Summer	+4·7	+3·1	+1·3	+1·5	+1·4	+3·7	−16·9	−37·8	*−54·9*	−54·3	−50·1	−41·7	+3·1	+11·6	+42·0	*+44·3*	+28·6	+33·7	+35·1	+29·0	+17·1	+4·5	−1·5	−7·3

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1941
The ranges are derived from the diurnal inequalities printed in Tables 150 to 155

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	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	W	V	N	W	V	N	W	V	D	I	H	D	I	H	D	I	H
	γ	γ	γ	γ	γ	γ	γ	γ	γ	′	′	γ	′	′	γ	′	′	γ
Jan.	19.1	30.1	24.4	12.9	20.5	6.8	31.2	52.0	86.4	6.77	1.41	16.7	4.29	0.79	10.8	10.99	4.02	34.8
Feb.	25.6	37.7	29.5	17.1	23.4	13.8	34.4	67.7	68.3	8.43	1.68	23.0	5.45	0.98	13.7	14.17	3.45	31.7
Mar.	55.3	46.9	49.1	37.0	40.3	16.5	189.3	115.2	141.3	9.68	3.31	55.1	8.62	2.08	34.4	18.34	14.78	207.4
Apr.	44.6	45.8	28.8	41.9	41.6	15.8	68.5	73.0	75.3	9.99	2.27	42.3	9.27	2.43	41.3	15.88	3.46	72.9
May	51.0	48.2	29.1	44.8	48.5	27.6	68.0	60.4	60.3	9.91	2.75	51.7	10.59	2.43	46.2	12.68	4.13	74.4
June	56.8	54.5	25.1	47.6	45.0	17.4	82.1	72.9	56.3	11.12	3.43	59.4	9.32	3.03	50.4	15.42	5.03	87.3
July	57.4	57.2	30.5	53.0	57.4	18.0	215.1	87.9	143.0	9.85	3.80	61.0	12.49	3.21	52.8	11.69	12.80	227.2
Aug.	57.0	58.9	44.5	51.0	54.9	21.9	113.4	86.9	142.2	12.31	3.10	57.9	11.69	2.96	50.0	15.97	5.94	118.0
Sept.	57.5	57.8	50.5	47.5	49.1	13.9	288.0	154.5	218.8	11.14	3.58	62.3	10.32	3.09	47.2	22.97	19.11	307.2
Oct.	43.7	41.6	26.9	36.2	33.8	9.6	53.6	78.7	119.4	9.01	2.47	44.1	6.98	2.51	38.3	16.30	4.59	51.8
Nov.	22.4	33.6	31.6	21.9	18.2	8.8	57.2	65.2	121.6	7.10	1.74	21.0	4.00	1.35	20.9	13.15	6.00	53.8
Dec.	13.1	31.0	22.6	11.3	19.4	9.6	40.6	55.0	102.1	6.40	1.26	11.4	4.26	0.77	9.4	9.80	3.04	51.8
Year	35.6	37.0	29.0	33.1	34.1	12.1	61.7	61.3	82.8	8.00	1.93	36.6	7.48	1.88	32.3	11.61	3.70	67.3
Winter	17.7	31.8	26.7	13.8	19.2	8.1	25.7	52.5	87.2	7.07	1.22	16.4	4.19	0.73	11.0	11.07	3.75	24.6
Equinox	47.8	45.9	34.5	39.3	40.8	12.1	100.9	97.9	99.8	9.70	2.77	48.8	8.75	2.39	38.3	17.14	7.53	114.4
Summer	54.2	53.9	28.7	47.9	50.1	20.1	90.3	62.7	87.5	10.43	3.20	56.6	10.76	2.84	49.0	9.83	5.23	99.2

NON-CYCLIC CHANGE

157 ESKDALEMUIR 1941

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0.4	0.0	-0.1	+3.5	+0.02	-1.0	-1.3	-1.34	-8.0
Feb.	0.0	-0.10	-0.1	-0.2	+0.36	0.0	-7.9	+0.13	-10.0
Mar.	-0.5	-0.03	+1.1	+6.0	+1.50	+9.6	-33.9	-0.36	-11.8
Apr.	+0.2	+0.04	-0.4	+5.2	+1.58	+0.5	-6.9	-2.21	-13.5
May	+0.6	+0.01	-0.3	+8.3	+0.33	-0.2	-8.9	-1.15	-3.1
June	+0.7	-0.05	-0.3	+1.2	+0.06	+0.8	-4.5	-0.30	+1.4
July	-0.8	-0.07	+0.2	+3.9	+0.14	-4.0	-9.5	-0.26	+6.2
Aug.	-0.2	+0.01	+0.3	+5.6	-0.72	-2.0	-48.4	+0.25	-42.3
Sept.	-0.2	-0.03	+0.4	+5.2	+0.17	-0.1	-6.9	-0.38	+9.1
Oct.	-4.9	-0.74	-3.7	+2.4	-1.16	-1.1	-37.0	-4.45	-27.5
Nov.	+5.0	+0.69	+4.4	+4.9	+0.93	+1.8	+15.0	+1.73	+16.4
Dec.	+0.3	+0.03	-0.6	+6.0	+0.40	-4.0	+0.2	+0.66	+2.2
Year	+0.1	-0.02	+0.1	+4.3	+0.30	0.0	-12.5	-0.64	-6.7
Winter	+1.4	+0.15	+0.9	+3.5	+0.43	-0.8	+1.5	+0.29	+0.1
Equinox	-1.3	-0.19	-0.7	+4.7	+0.52	+2.2	-21.2	-1.85	-10.9
Summer	+0.1	-0.03	0.0	+4.7	-0.05	-1.3	-17.8	-0.37	-9.5

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS
For all, a quiet, q and disturbed, d, days for H, D and V and for all days for N, W, I and T

158 ESKDALEMUIR 1941

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	16,000γ +			12° +			44,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	511	520	501	52.7	52.9	52.5	1040	1036	1045	16096	3680	69 52.0	47971
Feb.	509	514	505	51.9	52.2	51.2	1041	1041	1042	16095	3676	69 52.2	47971
Mar.	495	507	487	50.3	50.9	48.7	1049	1048	1029	16082	3665	69 53.4	47974
Apr.	507	509	505	50.0	49.7	50.1	1049	1051	1051	16095	3666	69 52.6	47978
May	519	517	515	49.3	48.7	49.4	1043	1047	1035	16107	3666	69 51.6	47977
June	521	523	515	48.6	48.7	49.0	1043	1044	1042	16110	3663	69 51.4	47977
July	506	510	482	47.8	47.8	47.1	1054	1053	1060	16096	3656	69 52.7	47982
Aug.	511	515	504	47.3	47.5	47.1	1049	1047	1056	16101	3655	69 52.3	47979
Sept.	490	507	424	46.2	47.1	44.1	1051	1052	1034	16082	3645	69 53.8	47974
Oct.	505	510	500	45.7	46.1	45.0	1059	1058	1057	16097	3646	69 52.9	47987
Nov.	505	518	484	44.6	44.9	44.5	1067	1063	1068	16099	3641	69 53.1	47994
Dec.	512	520	502	44.2	44.5	43.2	1065	1061	1069	16106	3640	69 52.6	47995
Year	508	514	494	48.2	48.4	47.7	1051	1050	1049	16097	3658	69 52.5	47980

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of a_n, b_n in the series $\Sigma(a_n \cos 15nt)$, t being reckoned in hours from midnight G.M.T.

Longitude of Eskdalemuir Observatory, 3°12′W.

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	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
ALL DAYS																								
Jan.	+5·1	+3·0	-3·8	-3·4	+1·5	-1·9	-0·5	+0·3	-10·8	-0·6	+0·5	+3·8	-0·4	-2·1	+0·1	+1·5	-1·7	-10·1	-3·4	+0·2	+0·6	+0·9	-0·1	-0·7
Feb.	+7·9	+2·0	-5·7	-1·0	+3·0	-1·5	+0·8	+0·9	-12·8	-1·5	+1·9	+5·4	-0·3	-1·3	+1·0	+2·3	-2·1	-13·8	-3·7	-1·4	+0·5	-0·3	-0·7	-0·6
Mar.	+6·4	-10·5	-11·4	+2·8	+2·0	-2·5	+1·7	+1·6	-15·7	-6·2	+1·9	+8·9	-1·5	-2·3	+2·3	+2·1	-7·1	-14·4	-6·9	-5·2	-3·3	+0·6	+0·1	+1·3
Apr.	+14·6	-5·5	-9·9	-1·6	+3·5	-0·3	+0·1	-0·1	-9·8	-10·7	+0·2	+11·1	-1·7	-4·3	+1·4	+2·3	+0·1	-12·1	-6·5	-1·4	+1·5	+0·7	-0·9	-0·9
May	+15·6	-8·5	-10·2	-0·9	+1·3	+0·9	+0·7	+0·1	-8·0	-18·9	+1·3	+8·5	-1·4	-2·1	+2·0	+1·1	+2·9	-11·7	-6·1	-2·6	+0·3	-0·2	-0·9	+0·3
June	+18·1	-8·9	-11·7	+0·3	-0·8	+0·3	+0·7	+0·6	-7·5	-24·0	+0·8	+8·1	-1·4	-2·3	+0·8	+0·8	+3·6	-7·8	-6·1	-3·6	+0·5	-0·5	-0·6	-0·3
July	+14·8	-14·0	-8·6	+6·9	-0·1	-5·6	+0·8	+1·6	-3·7	-21·7	+0·8	+9·5	-0·5	-2·8	0·0	+2·0	-2·2	-12·1	-2·9	-2·1	+0·3	-1·0	+1·0	-1·4
Aug.	+16·1	-11·3	-13·1	+5·1	+1·1	-2·0	-0·7	+0·6	-12·1	-18·2	+5·9	+10·3	-2·1	-4·0	+0·6	+0·9	-2·9	-14·6	-11·3	-1·0	+1·3	-0·4	-1·7	-1·4
Sept.	+1·5	-11·9	-9·8	+9·3	+7·5	-1·7	+1·6	-1·1	-18·0	-16·3	+1·0	+10·2	+0·9	-4·8	+2·2	+1·7	-9·5	-17·4	-3·8	-1·1	+2·9	+1·9	-1·8	+2·8
Oct.	+11·0	-1·0	-10·7	+1·5	+1·5	-0·1	+0·2	+0·5	-11·7	-8·8	+0·7	+9·1	-1·6	-2·3	+2·1	+2·4	-1·0	-11·3	-5·9	-2·6	-0·5	+1·6	-1·4	+0·6
Nov.	+6·1	+0·8	-6·1	+0·7	+0·3	-2·4	-0·1	-1·1	-12·4	-0·3	-1·9	+4·9	-0·9	-2·4	+1·9	+1·0	-4·2	-13·1	-1·4	-0·6	+0·4	+0·4	-0·5	-0·1
Dec.	+1·0	+3·0	-1·9	-0·7	+1·9	-2·6	-0·7	+0·2	-11·3	-2·4	-1·5	+5·9	-0·7	0·0	+0·5	+0·5	-0·3	-11·1	-3·6	+0·5	+1·0	+0·4	-1·0	-0·3
Year	+9·9	-5·2	-8·6	+1·6	+1·9	-1·6	+0·4	+0·3	-11·1	-10·8	+0·9	+8·0	-0·9	-2·5	+1·3	+1·6	-2·1	-12·5	-5·1	-1·7	+0·5	+0·3	-0·7	-0·1
Winter	+5·0	+2·2	-4·3	-1·1	+1·7	-2·1	-0·1	+0·1	-11·8	-1·2	-0·2	+5·0	-0·6	-1·5	+0·9	+1·3	-2·1	-12·0	-3·0	-0·3	+0·6	+0·3	-0·6	-0·4
Equinox	+8·4	-7·2	-10·5	+3·0	+3·6	-1·1	+0·9	+0·2	-13·8	-10·5	+0·7	+9·9	-1·0	-3·4	+2·0	+2·1	-4·4	-13·8	-5·8	-2·6	+0·2	+1·2	-1·0	+0·9
Summer	+16·2	-10·7	-10·9	+2·8	+0·4	-1·6	+0·4	+0·7	-7·8	-20·7	+2·2	+9·1	-1·3	-2·8	+0·8	+1·3	+0·4	-11·5	-6·6	-2·3	+0·6	-0·5	-0·5	-0·7
QUIET DAYS																								
Year	+11·5	-1·4	-7·4	-0·9	+2·0	-0·7	-0·2	+0·7	-4·9	-11·2	+2·2	+6·3	-2·1	-2·3	+0·7	+1·3	+3·5	-2·0	-2·7	-0·6	+1·1	-0·1	-0·5	-0·2
Winter	+3·3	+1·7	-4·0	-1·1	+1·1	-0·6	-0·4	+0·6	-6·5	-3·4	-0·3	+2·8	-1·7	-0·6	+0·9	+0·8	+2·1	-3·3	0·0	+0·2	+0·5	-0·6	-0·3	-0·2
Equinox	+14·0	-2·3	-7·7	+0·2	+2·9	-2·0	-0·7	+1·3	-4·8	-10·5	+3·6	+7·2	-3·1	-3·8	+1·2	+2·2	+2·3	-1·1	-3·0	-0·5	+1·7	-0·1	-0·8	-0·3
Summer	+17·1	-3·6	-10·6	-1·8	+2·1	+0·4	+0·5	+0·1	-3·3	-19·6	+3·3	-8·8	-1·6	-2·4	0·0	+0·9	+6·0	-1·5	-5·1	-1·5	+1·1	+0·3	-0·4	-0·1
DISTURBED DAYS																								
Year	+0·1	-17·8	-11·2	+14·0	+2·9	-5·0	+1·4	-0·4	-21·5	-11·4	-3·8	+10·0	+1·9	-4·4	+2·4	+1·2	-16·5	-39·0	-5·9	-3·8	-0·7	+1·6	-0·6	+1·5
Winter	+4·6	+4·1	-3·7	+3·2	+1·4	-3·7	-0·5	-1·2	-19·9	+5·6	+1·7	+6·7	+1·7	-5·3	+0·3	+1·5	-13·6	-34·7	-9·7	+1·5	+2·7	+3·7	-0·7	-2·2
Equinox	-17·4	-27·0	-18·8	+21·1	+10·1	-2·0	+4·2	-2·9	-32·7	-17·8	-9·6	+13·0	+3·7	-5·0	+5·0	+0·8	-20·7	-40·9	-2·7	-10·7	-5·0	+3·7	-1·8	+7·9
Summer	+13·2	-30·4	-11·2	+17·5	-2·7	-9·2	+0·5	+2·7	-11·8	-22·1	-3·5	+10·5	+0·3	-2·8	+2·0	+1·2	-15·1	-41·6	-5·3	-2·3	+0·2	-2·7	+0·7	-1·2

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being mean local time, reckoned in hours from midnight

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	North component								West component								Vertical component							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
ALL DAYS																								
Jan.	5·9	63	5·1	235	2·4	151	0·6	317	10·8	270	3·9	13	2·1	201	1·5	17	10·2	193	3·4	280	1·1	43	0·7	198
Feb.	8·1	79	5·8	267	3·3	126	1·1	55	12·9	267	5·7	26	1·3	201	2·5	37	13·9	192	4·0	255	0·5	134	0·9	242
Mar.	12·3	152	11·7	290	3·2	151	2·3	60	16·9	252	9·2	19	2·8	222	3·1	61	16·0	209	8·7	239	3·3	290	1·3	19
Apr.	15·6	114	10·0	267	3·6	105	0·2	131	14·5	226	11·1	8	4·6	212	2·7	44	12·1	183	6·7	264	1·7	77	1·3	239
May	17·8	122	10·2	271	1·6	66	0·7	94	20·5	206	8·6	15	2·5	223	2·3	73	12·1	169	6·7	253	0·3	131	0·9	300
June	20·1	119	8·9	278	0·9	302	0·9	61	25·1	201	8·1	12	2·7	220	1·2	59	8·6	158	7·1	246	0·7	142	0·6	257
July	20·4	137	11·0	315	5·6	191	1·8	38	22·0	193	9·6	11	2·8	199	2·0	12	12·3	193	3·6	241	1·0	175	1·7	157
Aug.	19·7	128	14·1	298	2·3	161	0·9	321	21·9	217	11·9	36	4·5	217	1·1	45	14·9	194	11·3	271	1·3	117	2·2	244
Sept.	12·0	176	13·5	320	7·7	112	2·0	138	24·3	231	10·2	12	4·9	179	2·8	65	19·8	212	3·9	260	3·5	66	3·3	340
Oct.	11·0	99	10·9	284	1·5	102	0·5	40	14·6	236	9·1	2	2·8	225	3·2	53	11·3	189	6·5	253	1·7	352	1·5	306
Nov.	6·2	86	6·1	283	2·4	182	1·1	199	12·4	272	5·3	346	2·6	210	2·2	75	13·8	201	1·5	253	0·6	56	0·5	269
Dec.	3·1	22	2·0	257	3·2	154	0·8	299	11·5	261	6·1	352	0·7	281	0·7	56	11·1	185	3·7	284	1·1	79	1·1	267
Year	11·2	121	8·7	287	2·5	140	0·5	61	15·5	229	8·0	13	2·7	210	2·0	51	12·6	193	5·4	258	0·6	66	0·7	277
Winter	5·5	69	4·5	263	2·7	151	0·2	321	11·9	267	5·0	341	1·6	211	1·6	47	12·2	193	3·0	270	0·7	70	0·7	247
Equinox	11·1	134	10·9	293	3·8	117	0·9	91	17·3	236	9·9	10	3·6	206	2·9	56	14·5	201	6·3	252	1·2	18	1·4	327
Summer	19·4	127	11·2	291	1·6	176	0·8	40	22·1	204	9·4	20	3·1	215	1·5	46	11·6	181	7·0	257	0·8	140	0·9	231
QUIET DAYS																								
Year	11·6	100	7·5	270	2·1	120	0·7	359	12·2	207	6·7	26	3·1	233	1·5	40	4·0	123	2·8	264	1·1	108	0·5	259
Winter	3·7	66	4·2	260	1·2	128	0·7	341	7·4	245	2·8	1	1·9	261	1·2	61	3·9	151	0·2	357	0·8	147	0·3	247
Equinox	14·2	152	7·7	278	3·5	135	1·5	347	11·6	208	8·1	33	4·9	229	2·5	41	2·6	119	3·1	267	1·7	102	0·8	261
Summer	17·4	105	10·7	267	2·2	89	0·5	93	19·9	193	9·4	27	2·9	223	0·9	11	6·1	107	5·3	260	1·1	84	0·4	272
DISTURBED DAYS																								
Year	17·8	183	17·9	328	5·7	159	1·5	120	24·3	245	10·7	346	4·8	166	2·7	77	42·4	206	7·0	243	1·7	346	1·6	351
Winter	6·1	52	4·9	317	3·9	169	1·3	215	20·7	289	6·9	21	5·6	172	1·5	23	37·3	205	9·8	333	4·6	47	2·3	210
Equinox	32·1	216	28·3	325	10·3	111	5·1	137	37·2	245	16·1	330	6·2	153	5·1	94	45·8	210	11·0	201	6·2	316	8·1	360
Summer	33·2	160	20·8	334	9·6	206	2·8	23	25·1	211	11·0	348	2·9	183	2·4	72	44·3	203	5·7	253	2·7	186	1·4	163

-KEW-

KEW OBSERVATORY

Latitude	51°28′ N.
Longitude	0°19′ W.
G.M.T. of Local Mean Noon	12h. 1m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	10·4	..
Thermometer bulbs	..	3·0
Rain-gauge site	5·5	..
Beckley rain-gauge rim	..	0·53
Sunshine recorder	..	13·3
Pressure-tube anemograph	28	23

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

METEOROLOGY

NOTES ON THE INSTRUMENTS

Solar radiation.– The tabulations of the radiation received on a surface perpendicular to the solar beam (Tables 173 and 175) were made on the assumption that the thermopile of the Gorczynski pyrheliograph had maintained its sensitivity. Subsequent investigation indicated that a progressive decrease in sensitivity had occurred and that all tabulations from 1938 onwards needed correction. The tabulated values for 1941 should be multiplied by the factor 1·17*.

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1941

There were no changes in the instruments in use during 1941 except that No. 1846 was used throughout as the measuring glass for the control rain-gauge.

Thermometer corrections 1941

	No. 788 N.P.L. 1933		No. 738 N.P.L. 1938		M.O. 5 N.P.L. 1913		M.O. 10 N.P.L. 1913		M.O. 18011 N.P.L. 1929		M.O. 29272 N.P.L. 1922	
	°F.		°F.		°A.		°A.		°F.		°F.	
Certified	2	+0·1	2	+0·2	260	+0·1	260	+0·3	2	0·0	12	0·0
	12	+0·1	12	+0·1	273	0·0	273	+0·1	22	0·0	32	0·0
	32	0·0	32	0·0	280	0·0	280	+0·2	32	0·0	62	0·0
	52	−0·1	52	−0·1	290	0·0	290	+0·1	52	0·0	82	0·0
	72	0·0	72	−0·1	300	0·0	300	0·0	72	0·0	112	0·0
	92	0·0	92	−0·2	310	0·0	316	+0·1	..	..	..	..
Applied		0·0		0·0		0·0		+0·1		0·0		0·0

* STAGG, J.M.; Solar radiation at Kew Observatory. *Geophys. Mem., London*, **11**, No. 86, 1950.

NOTES ON THE METEOROLOGICAL SUMMARIES

The mean temperature for the year 282·8°A. (49·6°F.) was identical with the average for the period 1871–1915, although January with a mean temperature of 274·7°A. (35·1°F.) was 40°F. below the average for that period. The lowest reading of the grass minimum thermometer was 256·6°A. (2·5°F.) on January 17 whilst the lowest temperature in the north-wall screen, 267·1°A. (21·4°F.) was recorded at about 5h. on January 16. There were 3 "ice days" i.e. days with maximum temperature in the screen 273·0°A. (32·0°F.) or less. All occurred in January when ice floes were seen on the River Thames. May, with a mean temperature of 282·7°A. (49·5°F.) was unseasonably cold, being 3·1°F. below the average for the period 1871–1915. The maximum temperature in the north-wall screen was 304·5°A. (88·7°F.) registered about 16h. on July 11. There were 12 days, 4 in June and 8 in July, on which the maximum temperature exceeded 300·0°A. (80·6°F.).

The rainfall for the year, 718 mm., was 18 per cent. above the average (606 mm.) for the standard period 1881–1915. August with 150 mm., a total never exceeded in any August since 1878, and July with 103 mm. were the wettest months and October with 19 mm. the driest. The heaviest fall in one day during the year was 31 mm. on July 26.

The sunshine for the year, 1341 hours, was 128 hours below the normal for the period 1906–35. June with 215 hours and July with 244 hours were the sunniest months.

The highest wind speed recorded in a gust was 24 m./sec. (54 m.p.h.) on October 18 at 13h. 35m. The highest on record is 33 m./sec. (73 m.p.h.) on November 23, 1938.

Diurnal variation of pressure and temperature; harmonic analysis.– Notes on the tables will be found in the *Observatories' Year Book, 1938*.

TABLE A – DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19′ W.

Values of c_η, α_η in the series $\Sigma c_\eta \sin(15nt + \alpha_\eta)$, t being local mean time reckoned in in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926
	mb.	mb.	°	°	mb..	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.21	0.02	141	315	0.28	0.31	150	151	0.20	0.17	352	346	0.04	0.07	185	202
February	0.07	0.05	191	73	0.30	0.36	146	146	0.15	0.12	351	340	0.04	0.03	97	108
March	0.24	0.11	264	38	0.41	0.40	140	149	0.10	0.07	339	332	0.03	0.04	351	25
April	0.03	0.28	29	31	0.04	0.40	146	151	0.05	0.03	186	185	0.04	0.04	353	353
May	0.30	0.32	1	27	0.33	0.35	143	148	0.05	0.09	142	161	0.03	0.02	317	319
June	0.34	0.30	356	17	0.31	0.32	133	143	0.08	0.09	161	160	0.00	0.01	104	260
July	0.25	0.26	6	16	0.23	0.31	145	140	0.10	0.10	144	153	0.03	0.01	327	281
August	0.05	0.21	276	20	0.27	0.34	146	144	0.03	0.06	137	155	0.05	0.04	289	309
September	0.26	0.12	19	6	0.39	0.40	147	152	0.01	0.01	214	350	0.06	0.04	338	332
October	0.28	0.06	126	76	0.34	0.38	160	160	0.12	0.09	349	359	0.02	0.01	304	22
November	0.21	0.03	83	124	0.35	0.34	160	160	0.15	0.13	355	358	0.05	0.03	186	183
December	0.10	0.08	296	137	0.31	0.31	150	152	0.15	0.15	356	353	0.07	0.07	205	205
Arithmetic mean	0.19	0.15			0.30	0.35			0.10	0.09			0.04	0.03		
Year	0.10	0.14	21	29	0.33	0.35	146	150	0.05	0.03	359	359	0.01	0.01	289	280
Winter*	0.07	0.03	124	111	0.31	0.33	152	152	0.17	0.14	353	350	0.04	0.05	178	208
Equinox*	0.10	0.14	34	32	0.38	0.39	148	153	0.04	0.04	336	333	0.04	0.03	339	359
Summer*	0.22	0.27	357	20	0.28	0.33	141	144	0.06	0.08	149	160	0.02	0.02	309	305

* "Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE B — DIURNAL VARIATION OF TEMPERATURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19′W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926	1941	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.59	0.99	226	221	0.25	0.43	43	35	0.03	0.17	165	208	0.02	0.01	16	3
February	1.43	1.53	221	221	0.48	0.57	33	34	0.08	0.12	198	211	0.03	0.06	148	169
March	2.16	2.45	215	222	0.68	0.63	32	40	0.03	0.07	196	334	0.07	0.11	185	197
April	2.48	3.21	224	226	0.37	0.48	62	51	0.19	0.22	25	24	0.01	0.07	274	218
May	3.13	3.72	225	227	0.20	0.15	99	74	0.29	0.31	40	35	0.12	0.04	6	20
June	3.58	3.72	218	226	0.03	0.02	275	84	0.27	0.26	31	35	0.08	0.10	16	33
July	3.50	3.68	222	225	0.18	0.06	129	50	0.34	0.29	25	31	0.10	0.07	54	28
August	2.46	3.54	223	226	0.37	0.34	44	52	0.21	0.30	33	28	0.03	0.03	240	218
September	2.79	3.22	223	228	0.56	0.71	36	49	0.13	0.14	59	24	0.14	0.16	202	213
October	2.19	2.32	228	229	0.65	0.76	48	50	0.11	0.10	257	228	0.08	0.12	210	200
November	1.34	1.39	228	226	0.45	0.57	43	44	0.12	0.18	237	232	0.06	0.02	127	141
December	0.87	0.90	219	226	0.34	0.40	25	41	0.16	0.16	222	215	0.03	0.04	41	38
Arithmetic mean	2.21	2.56			0.38	0.43			0.16	0.19			0.06	0.07		
Year	2.21	2.56	222	226	0.35	0.42	44	45	0.08	0.08	28	17	0.01	0.02	135	195
Winter*	1.06	1.20	223	223	0.38	0.49	36	39	0.09	0.15	218	217	0.02	0.01	105	121
Equinox*	2.40	2.80	223	226	0.55	0.64	42	47	0.05	0.09	23	4	0.07	0.11	203	207
Summer*	3.16	3.67	222	226	0.14	0.14	78	59	0.28	0.29	32	32	0.06	0.04	21	27

* "Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

There were no changes during 1941 in the method and procedures for observing potential gradient, air-earth current and conductivity.

The erection in March 1941, of a fire escape on the wall of the main Observatory Building through which the radio-active collector of the Kelvin electrograph projects, reduced the sensitivity of that instrument by nearly 50 per cent. To offset this it was necessary to obtain a proportional increase in the sensitivity of the electrometer. This was effected on July 31 by altering its scale value from 105 V./cm. to 60 V./cm.

In 1941 the mean value of the air-earth current for the year, allowing equal weight for each month. was 93×10^{-18} amp. cm.$^{-2}$. The mean value of the conductivity for the year was 44×10^{-18} ohm.$^{-1}$ cm.$^{-2}$

The mean factor for the year for the Kelvin electrograph was 3·95 giving an equivalent height for the collector of 25·3 cm. In 1941 there were 150, 151 and 64 days of electrical character 0, 1 and 2 respectively. The extreme hourly values of potential gradient in Table 183 are 1320 V./m. at 9h. on February 11 and −1515 V./m. at 15h. on January 28.

During the following months there were not 10 "quiet days" and other spells of 24 hours were used.

1941	Calendar days	Other spells	Total
January	5	2	7
February	7	1	8
March	5	2	7

The *Observatories' Year Book, 1938* should be consulted for an explanation of the figures in the foregoing paragraphs.

ATMOSPHERIC POLLUTION

During 1941 the highest estimate of pollution was 1·7 mg./m.^{3} and occurred on November 8 from 19h. to 20h. There were 19 days on which the pollution reached 1·0 mg./m.^{3}, the number of hours credited with 1·0 mg./m.^{3} or more being 77.

No change took place in instruments or procedure from that printed in the Introductions for 1938 and 1939. The Galitzin seismographs were not standardized during 1941. They were put out of adjustment by enemy action in January 1941 and it cannot be assumed that, during 1941, the constants did not change appreciably from the values determined in 1940. The distribution of the *Kew monthly bulletin* ceased in May 1940* but such seismological data for Kew Observatory as are available for 1941 are published in the *International seismological summary*. The total number of shocks recorded during the year was 355. The phases of 109 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed. No British earthquakes were recorded during the year.

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* It was resumed in 1947.

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005.61 is printed 05.61

161 KEW OBSERVATORY: h_b(height of barometer cistern above M.S.L.) = 10.4 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	09.9	95.2	01.4	06.4	01.4	04.1	09.5	03.2	07.6	99.3	86.7	91.0	12.8	07.0	09.3	23.2	20.9	22.0
2	27.6	09.9	18.4	06.0	99.1	02.6	03.2	97.3	99.8	88.4	*85.3*	*86.6*	23.0	12.2	16.3	22.5	19.9	21.5
3	34.6	27.6	31.7	21.2	01.2	11.8	02.0	96.5	99.8	99.1	88.4	93.8	*26.7*	23.0	24.7	21.0	20.1	20.6
4	*35.0*	31.8	*33.8*	*26.1*	21.1	*24.4*	98.9	*93.3*	*95.0*	11.0	99.0	05.5	*26.7*	23.2	*25.1*	20.3	14.4	17.7
5	31.8	24.8	28.6	25.7	06.4	18.2	00.2	97.8	99.0	16.0	10.8	13.0	23.2	19.6	21.6	14.4	10.5	11.4
6	24.8	21.8	22.9	10.4	01.1	05.3	98.0	96.3	96.9	24.9	15.8	19.5	20.1	17.9	19.0	11.8	10.4	11.1
7	26.6	22.4	24.3	09.9	02.9	06.1	97.4	93.5	95.7	31.1	24.9	28.5	21.2	18.9	19.6	11.2	07.6	09.0
8	30.7	26.3	27.9	10.2	08.2	08.9	06.2	*93.3*	99.9	31.1	28.7	30.1	22.5	20.8	21.7	08.1	02.4	05.8
9	34.0	28.8	32.0	11.9	09.9	10.7	07.4	05.7	06.5	31.2	27.4	29.0	21.3	17.8	19.6	02.6	*97.9*	*99.0*
10	28.8	22.5	24.9	18.1	10.3	14.0	12.2	05.5	08.2	*33.2*	29.4	*31.3*	23.8	19.1	20.6	11.5	98.1	04.1
11	22.5	19.6	20.6	18.7	05.4	13.9	20.5	12.2	17.0	29.4	20.8	25.0	25.6	23.8	24.7	17.5	11.5	15.6
12	23.4	21.2	22.3	05.5	92.1	97.2	20.4	15.5	18.3	20.8	18.3	19.3	25.5	23.2	24.4	17.3	13.3	15.1
13	21.9	11.4	17.5	96.1	91.8	94.1	18.6	14.6	15.9	19.7	15.6	17.9	23.7	19.9	21.7	22.3	15.6	19.0
14	11.4	98.4	03.2	95.1	84.3	89.1	24.4	18.5	21.3	15.8	07.2	10.8	19.9	15.8	17.4	22.7	18.9	21.2
15	02.8	96.5	98.7	94.7	84.3	91.3	28.2	24.4	26.5	14.9	10.0	12.3	18.4	15.3	16.8	23.8	17.0	19.5
16	03.8	02.6	03.1	90.4	*74.2*	*79.1*	28.8	25.3	27.0	15.0	11.1	13.3	18.4	13.8	16.3	25.8	23.8	24.8
17	09.2	02.7	06.0	86.4	78.1	83.5	28.9	26.0	27.5	11.4	03.8	07.9	14.6	06.2	10.4	24.8	21.6	23.4
18	08.8	83.5	96.7	86.1	84.0	84.9	29.0	26.0	27.7	03.8	94.7	98.2	06.2	98.4	01.5	21.7	18.0	19.8
19	94.8	82.8	88.4	87.7	85.4	86.3	29.7	26.6	28.0	06.1	95.9	01.4	06.1	99.4	01.5	21.8	19.6	20.5
20	92.7	79.5	85.0	91.8	85.6	89.0	*30.6*	26.1	*28.7*	13.4	05.8	09.6	17.9	06.1	12.5	21.9	20.1	21.0
21	81.7	*73.6*	*77.3*	01.1	91.3	95.0	26.1	17.6	20.2	18.2	13.3	16.0	18.3	13.2	16.3	21.1	16.2	18.5
22	89.0	75.9	82.7	01.3	89.6	96.4	17.9	08.1	13.5	20.1	17.8	18.8	13.2	02.3	09.8	16.3	12.6	14.4
23	92.2	88.5	89.8	00.2	90.2	97.5	19.0	05.9	12.2	22.4	19.9	20.7	04.6	95.7	99.2	19.1	13.0	16.3
24	96.4	92.2	95.3	05.8	96.9	99.7	19.8	13.6	17.3	22.9	19.0	21.7	06.2	02.0	04.2	19.4	16.1	17.8
25	03.1	95.9	98.7	11.2	05.6	08.7	15.0	07.5	12.7	19.0	09.8	13.3	02.1	88.5	97.6	18.3	15.4	16.8
26	16.9	03.1	09.9	15.5	10.9	13.5	08.7	04.0	06.5	10.4	07.2	08.4	93.7	*88.0*	*89.4*	23.2	18.2	20.2
27	17.5	11.5	14.8	10.9	99.6	02.7	06.7	00.8	04.5	07.9	06.1	06.7	02.1	93.7	98.1	*26.6*	23.2	*25.5*
28	13.0	10.3	11.3	06.0	00.0	02.6	00.8	95.4	97.5	14.6	07.3	09.7	04.4	02.1	03.1	26.5	22.9	24.7
29	15.4	12.9	14.4				07.1	99.0	03.6	16.9	14.5	15.7	05.6	03.1	04.5	24.6	21.5	23.2
30	14.5	00.3	07.6				09.8	06.6	07.5	14.6	06.5	09.3	14.3	05.4	10.0	22.7	19.9	21.5
31	01.5	98.2	99.4				10.1	99.3	07.1				21.3	14.3	18.1			
Mean	13.43	05.54	09.30	05.37	96.71	01.10	14.04	08.24	11.26	16.09	10.03	12.81	15.59	09.99	12.74	19.47	15.35	17.36

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*23.1*	21.1	*22.1*	18.4	11.1	14.2	26.8	25.1	26.2	28.6	22.2	25.9	20.3	16.4	18.6	35.1	25.6	30.0
2	*23.1*	19.7	21.6	19.0	16.6	18.0	27.1	25.7	26.1	29.9	27.9	28.8	20.4	19.2	19.8	*40.7*	35.1	*39.1*
3	20.0	14.5	16.7	17.4	12.2	14.6	27.2	24.7	26.0	29.0	24.4	26.4	22.1	19.6	20.7	40.0	35.2	37.0
4	21.3	15.8	19.3	12.2	01.2	06.7	25.1	20.6	22.8	24.5	22.2	23.3	23.3	18.0	20.2	35.3	32.5	33.9
5	22.9	21.2	22.0	05.7	01.0	03.3	20.6	15.7	17.6	23.4	21.7	22.5	24.4	23.0	23.6	32.5	28.9	31.1
6	*23.1*	20.1	21.7	13.4	05.7	11.5	21.5	15.4	17.2	24.4	22.3	23.4	23.1	11.8	16.9	28.9	95.8	14.5
7	20.3	16.2	18.3	12.6	11.5	12.1	29.0	21.2	25.3	24.7	22.6	23.6	19.9	11.9	16.9	98.2	*94.2*	*96.0*
8	16.9	13.4	15.1	11.6	05.2	07.9	30.6	27.8	29.0	25.5	22.9	24.3	20.5	16.2	19.1	06.4	98.0	03.2
9	14.4	12.8	13.8	14.1	08.0	12.1	27.9	26.9	27.5	23.0	10.6	16.7	16.2	93.4	04.6	11.3	05.2	07.4
10	13.9	08.4	11.0	11.2	06.9	09.4	27.3	20.2	24.1	10.6	06.4	08.3	93.4	*86.0*	*88.2*	12.5	07.4	11.1
11	08.8	02.3	05.1	08.2	04.2	05.9	20.3	16.9	18.1	24.9	02.7	11.9	94.1	89.1	92.6	13.8	04.7	10.4
12	05.5	03.6	04.4	13.1	06.5	09.7	23.5	19.3	21.2	30.4	24.9	28.8	02.3	88.3	96.4	13.9	05.3	07.9
13	07.6	02.6	05.0	13.1	03.5	07.9	24.8	22.8	23.7	30.1	20.8	26.6	09.6	01.2	03.4	19.8	11.5	16.1
14	09.4	02.7	07.0	08.7	05.8	07.5	23.0	18.4	20.2	20.8	11.7	14.9	17.0	09.6	14.7	12.0	04.5	09.1
15	05.5	*99.3*	*01.7*	06.1	*94.7*	*99.0*	30.6	22.6	27.3	19.2	15.2	17.9	16.7	10.8	14.9	16.1	11.8	14.4
16	19.8	05.4	11.5	02.5	95.5	00.2	*32.7*	30.6	*31.6*	16.0	09.2	12.3	10.8	91.9	99.5	16.6	14.5	15.6
17	22.5	19.8	21.7	04.6	01.7	03.1	32.5	30.1	31.2	15.9	05.4	12.0	11.0	98.7	02.9	26.1	16.2	20.5
18	21.3	15.0	17.2	13.5	00.9	07.1	31.1	28.1	29.7	10.6	*00.7*	*04.2*	16.0	11.0	14.6	30.1	25.6	27.8
19	16.3	11.7	14.5	14.2	12.3	13.4	28.5	26.0	27.2	15.6	10.6	13.8	15.1	09.7	11.6	34.2	29.6	31.4
20	19.5	12.2	16.1	12.3	08.8	10.2	27.3	25.5	26.4	22.9	14.9	19.2	11.8	11.0	11.4	36.1	33.9	35.1
21	19.7	18.7	19.2	10.6	04.7	08.2	26.8	24.5	25.7	31.5	22.2	26.6	12.2	08.1	09.7	35.0	30.5	32.4
22	18.7	08.7	12.8	12.4	04.7	08.6	25.4	21.6	23.3	*31.8*	26.2	28.8	12.0	03.9	07.2	31.5	28.5	29.8
23	16.5	09.7	13.8	12.2	01.7	07.5	23.1	20.8	22.0	29.1	26.3	27.8	16.2	04.2	10.0	33.9	30.0	31.9
24	16.3	13.9	15.4	16.6	02.3	12.7	21.0	17.7	18.9	31.1	28.4	29.6	18.2	16.0	17.4	30.0	27.2	28.1
25	14.2	08.2	10.9	15.7	07.5	09.7	21.1	18.7	20.1	31.6	27.9	*30.5*	*26.8*	16.5	21.3	32.2	25.8	27.9
26	11.4	06.9	08.9	15.6	08.1	10.7	20.0	15.9	17.3	29.1	24.6	26.7	*26.8*	19.2	*24.1*	32.7	20.0	28.3
27	13.6	11.2	12.8	17.8	10.0	15.7	16.2	09.3	12.8	28.9	11.5	23.1	19.2	13.0	15.1	26.5	17.2	21.7
28	13.7	10.6	12.7	10.0	06.1	07.7	09.8	*07.9*	*08.6*	11.7	05.4	08.8	22.4	13.6	17.8	30.1	25.8	27.8
29	10.6	07.6	08.3	10.0	07.1	08.3	16.0	09.6	12.2	12.9	08.1	11.1	24.8	22.4	23.9	32.5	29.6	30.6
30	10.3	08.6	09.5	19.6	09.4	12.7	22.2	15.9	18.1	14.7	10.0	12.7	25.6	22.7	23.9	34.4	32.3	33.1
31	11.5	08.7	09.9	*26.4*	19.6	*23.9*				16.6	08.7	11.7				33.3	32.0	32.5
Mean	15.86	11.31	13.55	12.86	06.27	09.65	24.63	20.85	22.59	23.19	16.73	20.07	16.41	09.21	12.70	26.18	19.82	23.09
									Annual	17.00	10.93	13.93						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

162 KEW OBSERVATORY: h_b = 10·4 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	09·45	09·31	09·30	09·18	08·91	08·76	*08·73*	08·90	09·19	09·33	09·58	09·64	09·36	09·01	08·92	08·93	09·17	09·36	09·52	09·67	*09·75*	09·64	09·72	09·71	09·65	09·30
Feb.	01·20	01·08	00·99	00·77	00·71	*00·65*	00·66	00·83	01·13	01·29	*01·51*	01·46	01·35	01·08	00·85	00·73	00·86	01·00	01·23	01·27	01·34	01·24	01·33	01·35	01·36	01·10
Mar.	11·33	11·26	11·13	10·91	*10·79*	10·81	10·91	11·20	11·52	11·80	*11·98*	11·91	11·81	11·54	11·25	11·05	10·91	10·90	11·05	11·21	11·29	11·26	11·29	11·12	11·21	11·26
Apr.	13·08	12·91	12·77	12·66	12·59	12·63	12·86	13·05	13·05	13·16	13·18	13·04	12·83	12·72	12·49	12·21	12·14	*12·12*	12·30	12·60	13·00	13·18	13·31	13·34	*13·35*	12·81
May	12·75	12·65	12·57	12·52	12·46	12·57	12·77	12·95	13·12	13·15	13·12	13·04	12·86	12·75	12·57	12·35	12·27	*12·23*	12·26	12·47	12·76	12·99	13·13	13·18	*13·19*	12·74
June	17·57	17·51	17·35	17·26	17·31	17·40	17·56	17·71	17·76	17·73	*17·79*	17·72	17·57	17·41	17·21	16·98	16·82	16·70	*16·70*	16·84	17·08	17·35	17·56	17·58	17·57	17·36
July	13·92	13·82	13·67	13·56	13·62	13·66	13·77	13·92	*14·03*	13·92	13·83	13·67	13·59	13·50	13·38	13·27	13·07	*12·97*	12·98	13·15	13·26	13·50	13·63	13·62	13·60	13·55
Aug.	09·49	09·39	09·33	09·24	*09·17*	09·22	09·38	09·61	09·72	09·92	09·89	09·87	09·83	09·72	09·63	09·61	09·53	09·50	09·54	09·68	09·94	10·08	*10·10*	10·03	09·97	09·65
Sept.	22·95	22·85	22·70	22·57	22·46	22·47	22·67	22·84	22·94	*23·12*	23·01	22·84	22·70	22·49	22·29	22·07	*21·83*	21·87	22·07	22·33	22·62	22·80	22·80	22·85	22·82	22·59
Oct.	20·51	20·35	20·18	19·95	19·83	19·73	19·69	19·79	20·06	20·27	20·27	20·15	19·95	19·75	19·68	*19·63*	19·67	19·90	20·19	20·45	20·51	*20·55*	20·49	20·36	20·33	20·07
Nov.	12·89	12·76	12·68	12·54	12·42	12·43	12·35	12·46	12·80	12·93	13·07	12·98	12·59	12·32	*12·11*	12·19	12·29	12·54	12·78	12·97	13·12	13·14	13·23	*13·24*	13·19	12·70
Dec.	22·97	22·86	22·89	22·85	22·72	*22·67*	22·76	22·92	23·19	23·46	*23·78*	23·60	23·27	22·99	22·85	22·84	22·89	22·95	23·09	23·20	23·24	23·27	23·33	23·36	23·27	23·09
Annual	14·09	13·97	13·87	13·75	13·66	13·66	13·75	13·93	14·12	14·25	*14·33*	14·24	14·05	13·85	13·68	13·57	*13·53*	13·58	13·72	13·90	14·07	14·16	14·24	14·23	14·19	13·93

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

163 KEW OBSERVATORY: h_b = 10·4 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	10·76	10·62	10·61	10·49	10·22	10·07	*10·04*	10·21	10·50	10·64	10·89	10·95	10·67	10·31	10·22	10·23	10·47	10·66	10·83	10·98	*11·06*	10·95	11·03	11·02	10·96	10·61
Feb.	02·48	02·37	02·28	02·06	02·00	*01·94*	01·95	02·13	02·42	02·58	*02·80*	02·74	02·63	02·36	02·13	02·00	02·14	02·28	02·51	02·63	02·62	02·53	02·61	02·64	02·64	02·38
Mar.	12·63	12·55	12·43	12·21	*12·08*	12·11	12·21	12·50	12·81	13·10	*13·27*	13·20	13·09	12·82	12·53	12·33	12·18	12·18	12·34	12·50	12·58	12·56	12·58	12·50	12·41	12·55
Apr.	14·38	14·20	14·07	13·95	13·89	13·93	14·15	14·34	14·34	14·45	14·46	14·32	14·10	13·99	13·76	13·49	13·42	*13·39*	13·58	13·88	14·29	14·47	14·60	14·63	*14·64*	14·10
May	14·03	13·93	13·86	13·80	13·75	13·86	14·05	14·23	14·39	14·43	14·39	14·31	14·13	14·01	13·83	13·61	13·53	*13·49*	13·52	13·74	14·03	14·26	14·41	14·46	*14·47*	14·01
June	18·83	18·77	18·61	18·53	18·58	18·67	18·82	18·97	19·01	18·99	*19·04*	18·97	18·81	18·65	18·45	18·21	18·05	17·93	*17·93*	18·08	18·32	18·60	18·81	18·84	18·83	18·61
July	15·16	15·07	14·92	14·81	14·87	14·92	15·01	15·16	*15·27*	15·15	15·06	14·89	14·81	14·73	14·60	14·49	14·29	*14·19*	14·21	14·38	14·49	14·74	14·87	14·86	14·84	14·78
Aug.	10·74	10·65	10·59	10·50	*10·43*	10·48	10·64	10·87	10·97	11·17	11·14	11·11	11·06	10·96	10·86	10·84	10·76	10·74	10·77	10·93	11·19	11·32	*11·35*	11·28	11·22	10·90
Sept.	24·22	24·12	23·97	23·85	23·73	23·74	23·94	24·11	24·21	*24·38*	24·27	24·09	23·95	23·74	23·54	23·32	*23·07*	23·12	23·33	23·59	23·88	24·07	24·07	24·11	24·09	23·85
Oct.	21·79	21·63	21·46	21·23	21·12	21·02	20·98	21·08	21·34	21·55	21·55	21·41	21·21	21·02	20·94	*20·89*	20·93	21·17	21·46	21·72	21·79	*21·83*	21·77	21·64	21·61	21·35
Nov.	14·17	14·05	13·97	13·83	13·71	13·72	13·64	13·75	14·09	14·22	14·35	14·26	13·87	13·60	*13·39*	13·46	13·56	13·82	14·06	14·25	14·41	14·43	14·52	*14·53*	14·47	13·99
Dec.	24·28	24·17	24·20	24·15	24·02	*23·98*	24·07	24·22	24·50	24·77	*25·09*	24·90	25·03	24·29	24·15	24·14	24·19	24·26	24·39	24·51	24·54	24·57	24·63	24·67	24·58	24·39
Annual	15·36	15·25	15·15	15·03	14·94	14·94	15·03	15·21	15·40	15·53	*15·60*	15·51	15·32	15·11	14·94	14·83	*14·79*	14·85	14·99	15·17	15·34	15·44	15·52	15·51	15·47	15·20

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

164 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	74·50	74·41	74·38	74·30	74·18	74·17	*74·14*	74·26	74·34	74·52	74·73	75·05	75·28	75·51	*75·54*	75·51	75·36	75·10	74·95	74·76	74·59	74·57	74·46	74·49	74·50	74·71
Feb.	76·51	76·35	76·24	76·13	76·13	*75·98*	75·99	76·10	76·23	76·63	77·26	77·97	78·52	78·94	79·15	*79·23*	78·94	78·49	78·12	77·66	77·32	77·06	76·94	76·84	76·67	77·28
Mar.	77·74	77·57	77·29	77·06	76·88	76·71	*76·58*	76·61	76·96	77·61	78·53	79·46	80·23	80·77	81·24	*81·34*	81·18	80·66	79·95	79·26	78·80	78·46	78·14	77·89	77·65	78·62
Apr.	78·70	78·41	78·11	77·83	77·62	*77·51*	77·68	78·36	79·19	80·09	80·88	81·50	82·04	82·46	82·66	*82·77*	82·46	82·31	81·92	81·05	80·41	79·87	79·41	79·11	78·84	80·10
May	80·87	80·52	80·06	79·63	*79·29*	79·35	80·03	81·13	82·10	82·96	83·77	84·42	84·92	85·40	85·70	*85·86*	85·65	85·42	85·08	84·36	83·32	82·48	81·81	81·32	80·95	82·73
June	86·97	86·54	86·20	85·69	*85·39*	85·44	86·22	87·05	87·94	88·98	89·76	90·58	91·23	91·79	92·32	*92·80*	92·74	92·82	92·43	91·69	90·52	89·38	88·61	87·87	87·16	89·21
July	89·76	89·24	88·71	88·23	*87·92*	87·98	88·74	89·75	90·72	91·86	92·85	93·51	94·03	94·60	94·70	94·79	*95·09*	94·87	94·64	93·85	92·63	91·62	90·78	90·27	89·72	91·71
Aug.	86·91	86·68	86·38	86·11	85·96	*85·72*	85·93	86·47	87·26	88·09	88·89	89·44	89·95	90·41	90·81	*91·00*	90·67	90·46	90·11	89·19	88·37	87·85	87·46	87·14	86·86	88·22
Sept.	86·73	86·35	86·11	85·96	85·73	*85·63*	85·72	86·11	86·84	87·76	88·75	89·57	90·23	90·73	91·21	*91·42*	91·25	90·82	89·90	88·74	88·17	87·68	87·31	86·87	86·53	88·15
Oct.	82·69	82·46	82·40	82·25	82·08	82·01	*82·00*	82·10	82·59	83·51	84·39	85·39	86·06	86·31	*86·52*	86·48	86·07	85·38	84·64	84·15	83·74	83·38	83·01	82·74	82·48	83·84
Nov.	79·60	79·49	79·38	79·34	*79·20*	79·28	79·34	79·31	79·32	79·90	80·61	81·23	81·80	82·04	*82·07*	81·98	81·72	81·26	80·89	80·58	80·27	79·99	79·95	79·70	79·59	80·34
Dec.	78·33	78·29	78·23	78·36	78·29	78·21	78·20	*78·12*	78·13	78·32	78·62	79·16	79·70	80·08	*80·15*	80·05	79·78	79·57	79·37	79·13	79·02	78·77	78·70	78·58	78·37	78·88
Annual	81·64	81·39	81·15	80·93	80·75	*80·69*	80·91	81·31	81·83	82·55	83·28	83·97	84·53	84·95	85·20	*85·30*	85·10	84·79	84·36	83·73	83·12	82·62	82·21	81·93	81·63	82·84

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

TEMPERATURE

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

165 KEW OBSERVATORY: North-wall screen: h_t(height of thermometer bulb above ground) = 3·0 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	75·5	70·9	73·5	78·5	73·9	75·9	83·2	79·0	81·0	78·7	75·3	77·2	87·1	79·3	82·6	87·7	80·5	84·1
2	71·9	69·2	70·6	75·8	73·0	74·6	83·4	79·2	81·7	80·8	77·7	79·1	88·1	77·4	82·7	85·9	80·4	82·8
3	72·4	68·4	70·5	74·0	72·2	73·0	83·1	77·8	79·7	82·3	77·5	79·8	82·7	76·2	*79·0*	85·0	80·6	*82·5*
4	73·5	71·2	72·6	74·5	70·4	73·1	81·5	72·9	77·5	83·4	77·6	79·9	87·2	73·5	80·3	96·0	83·3	89·1
5	73·6	73·0	73·4	73·8	*67·8*	*71·6*	81·2	72·9	77·5	83·2	74·9	79·0	84·2	76·9	80·9	88·4	85·4	86·6
6	73·6	71·7	72·8	79·0	73·3	75·8	79·7	74·9	77·9	78·5	76·2	77·2	82·5	76·0	79·7	90·4	84·8	87·0
7	72·6	71·6	72·0	83·8	74·1	79·2	81·3	74·7	77·4	80·0	73·9	77·1	83·3	76·9	79·7	93·1	81·2	87·1
8	75·7	72·3	74·3	*84·3*	79·9	82·3	83·2	78·1	81·0	80·7	73·9	77·4	82·8	75·0	79·1	90·5	84·4	86·7
9	75·1	72·8	73·7	83·6	81·7	*82·7*	80·9	74·7	77·4	80·2	74·6	*76·7*	83·0	74·9	79·4	90·1	84·0	86·5
10	77·2	74·2	75·8	83·0	76·9	80·6	82·8	74·3	78·5	80·3	*72·6*	77·1	84·1	74·4	79·6	86·4	81·7	83·7
11	78·1	76·6	77·4	81·4	72·9	77·2	80·5	77·3	78·6	84·2	75·5	79·8	87·2	73·7	81·2	88·3	81·3	84·4
12	76·7	73·0	75·7	80·3	77·8	79·0	78·2	76·1	77·1	*87·8*	80·5	*84·0*	89·3	78·9	84·7	90·1	*80·2*	85·4
13	76·9	72·1	74·7	81·6	77·2	78·9	82·1	75·7	78·6	86·0	80·3	82·8	88·1	82·6	85·1	89·6	80·9	85·3
14	76·0	74·1	74·9	82·5	77·7	80·4	85·7	76·4	80·8	85·2	79·7	82·4	86·8	79·5	83·3	90·1	80·9	86·0
15	74·8	68·3	73·0	81·8	77·5	79·2	81·3	74·7	77·5	86·1	78·6	81·6	82·3	75·5	79·2	93·3	86·4	89·5
16	73·3	*67·1*	*69·9*	82·0	77·6	79·3	83·0	74·0	77·2	86·5	75·7	81·4	87·2	*73·3*	81·2	95·8	83·7	89·6
17	73·0	67·8	70·5	81·7	78·2	80·3	78·8	73·5	76·5	87·6	75·7	82·3	89·3	76·2	83·3	97·9	84·5	90·8
18	74·7	68·0	71·9	80·3	76·8	78·9	84·1	73·8	78·3	86·8	79·3	82·8	91·8	76·2	84·6	00·3	85·1	93·2
19	77·3	72·3	75·0	77·5	73·9	75·4	82·8	*69·8*	76·2	86·3	78·7	81·7	86·2	80·9	83·8	98·8	88·4	93·4
20	78·3	73·4	75·3	76·5	73·0	74·7	81·1	73·2	76·6	84·2	78·5	81·6	85·3	79·6	83·0	00·1	86·2	93·4
21	81·2	77·4	79·3	77·7	72·0	74·7	*85·8*	73·8	80·1	87·9	79·8	83·5	91·2	77·3	84·4	02·8	88·6	95·5
22	*81·3*	76·6	*79·4*	78·2	71·6	74·9	83·7	78·5	81·2	85·0	76·7	80·9	90·3	83·8	86·4	*03·6*	90·5	*97·5*
23	79·4	75·3	77·9	78·7	72·8	75·3	82·7	74·3	79·1	81·3	76·0	79·2	87·5	83·4	85·2	97·5	88·9	93·3
24	78·8	76·6	77·7	77·7	71·5	74·9	80·1	71·5	76·9	80·3	74·4	77·7	85·6	81·7	83·6	99·4	88·2	93·1
25	78·2	76·2	77·3	78·1	73·0	75·1	84·7	79·3	81·8	84·3	76·6	79·8	85·8	82·0	83·7	98·5	87·4	93·5
26	76·3	75·0	75·8	78·0	70·5	74·1	84·6	79·8	*82·4*	83·2	77·5	79·7	86·6	79·2	83·1	97·1	88·4	92·0
27	76·2	74·4	75·0	83·2	76·0	80·3	84·0	78·7	81·3	80·3	77·3	78·6	87·5	82·1	84·1	95·2	87·0	91·0
28	79·4	76·2	77·9	84·2	79·9	82·4	83·1	77·9	80·2	82·3	76·4	79·6	*91·9*	79·8	*86·9*	94·5	87·3	91·2
29	77·4	74·5	75·5				78·2	74·9	76·7	83·1	78·3	80·2	88·5	82·1	85·3	96·2	88·7	91·8
30	77·9	74·7	76·2				78·7	72·8	75·5	87·5	78·2	82·9	88·2	83·6	85·5	98·1	83·3	90·4
31	77·1	75·4	76·4				81·1	71·0	*76·1*				87·7	81·6	84·1			
Mean	76·2	72·9	74·7	79·7	74·8	77·3	82·1	75·3	78·6	83·5	76·9	80·1	86·8	78·5	82·7	94·0	84·7	89·2

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	99·9	86·5	93·3	92·6	87·5	89·5	91·3	82·3	87·6	87·9	79·5	84·1	80·7	75·4	78·1	79·7	74·7	77·8
2	01·1	89·8	95·0	94·4	86·3	89·7	96·7	86·1	90·9	90·6	78·4	84·0	79·3	76·3	77·6	79·4	75·3	77·6
3	99·3	88·6	93·3	*96·2*	82·7	89·8	*98·3*	89·3	*93·2*	90·4	78·5	84·7	79·4	75·2	77·1	79·8	74·4	77·4
4	93·9	86·9	90·5	95·2	87·1	90·0	97·8	87·7	91·9	89·2	84·7	86·9	77·8	75·9	76·9	81·0	79·6	80·2
5	97·5	84·5	91·3	89·4	85·4	86·8	96·2	88·0	90·8	91·2	87·1	88·7	81·0	74·0	*76·8*	81·9	79·9	80·8
6	98·3	87·3	92·9	90·1	84·4	*86·6*	91·7	86·6	89·6	*94·5*	84·1	*88·9*	84·1	74·6	80·4	83·2	80·2	82·0
7	00·5	85·8	94·5	91·2	*82·1*	87·0	91·1	84·7	87·9	92·1	84·0	88·1	83·6	75·9	79·6	80·2	74·5	77·6
8	04·1	87·6	95·7	89·6	84·4	86·6	92·2	81·7	87·3	90·8	86·8	88·3	81·0	74·4	77·0	78·2	74·0	76·4
9	00·3	90·2	95·3	91·3	83·9	87·8	93·8	85·8	90·0	90·2	86·4	88·4	81·3	74·5	77·8	83·3	78·2	81·4
10	02·2	90·1	95·6	93·2	87·8	*90·3*	90·8	86·9	89·1	89·2	86·4	88·0	86·4	77·3	82·5	85·2	82·6	84·2
11	*04·5*	90·1	*97·1*	92·6	86·9	89·5	91·8	85·1	88·4	86·7	80·3	84·8	86·1	81·6	83·8	85·1	82·9	83·8
12	02·8	90·7	95·2	92·4	85·5	88·4	89·8	83·8	86·7	87·2	76·8	81·3	84·3	81·3	82·7	85·3	79·9	83·0
13	96·4	89·9	93·0	89·9	86·1	88·1	91·0	85·3	87·8	85·6	75·4	80·8	81·4	78·1	80·0	83·5	78·6	81·2
14	96·2	87·9	91·5	92·2	86·2	88·9	88·7	84·9	87·4	86·4	79·7	83·0	81·6	76·3	79·2	*86·3*	83·3	*84·5*
15	91·8	87·5	89·6	90·8	85·8	88·3	87·3	83·3	85·3	87·2	80·0	83·3	79·3	*70·4*	75·8	84·5	81·3	82·7
16	90·3	87·0	88·9	90·3	84·4	87·5	87·5	79·6	84·6	88·5	81·9	85·6	84·0	73·1	79·2	81·3	76·6	79·7
17	93·1	85·7	89·1	90·8	85·3	87·9	89·8	*77·6*	*83·5*	87·8	80·3	84·8	84·1	81·2	82·5	81·3	75·9	78·6
18	90·4	86·9	88·9	92·0	85·0	88·0	90·5	77·9	84·5	89·7	86·7	88·0	83·6	79·9	81·7	78·6	71·8	75·8
19	90·9	85·5	87·6	91·5	84·0	87·3	88·2	84·7	86·4	90·3	85·2	87·6	82·6	78·1	80·7	79·2	71·7	75·5
20	92·1	*84·1*	88·2	90·9	85·2	87·6	90·4	83·8	87·0	89·3	84·9	87·5	84·5	80·6	82·7	79·7	75·2	77·2
21	94·2	84·2	88·9	91·6	83·8	87·5	91·2	83·1	86·4	87·4	80·0	84·4	85·2	80·9	83·3	78·1	73·0	75·9
22	96·2	84·4	90·8	91·3	85·3	87·9	92·2	85·7	88·3	86·4	78·9	82·2	*87·4*	80·4	*84·4*	82·7	77·5	79·9
23	96·2	86·1	91·1	89·1	84·2	87·0	90·3	84·9	87·2	84·3	76·7	80·2	84·9	79·0	82·5	81·7	75·9	78·6
24	99·4	84·3	92·1	92·5	86·2	88·7	93·1	86·7	89·2	83·8	77·5	80·3	84·8	80·0	83·4	84·6	80·9	82·2
25	01·5	88·1	95·1	94·1	86·5	89·9	94·1	85·7	89·3	82·0	79·0	80·7	85·1	75·0	82·3	83·6	74·2	80·6
26	94·3	89·5	92·0	91·8	85·9	88·7	93·1	86·3	90·0	82·5	78·2	80·3	82·6	72·9	78·2	77·9	72·2	75·4
27	97·1	86·6	91·5	90·4	84·4	87·6	96·8	88·4	92·1	83·6	76·4	80·3	82·8	80·2	82·2	79·8	71·4	77·0
28	94·4	88·7	91·2	92·0	86·0	88·5	92·1	87·0	89·5	84·2	80·0	82·1	83·6	82·0	82·9	76·2	70·8	73·7
29	91·7	86·5	89·4	91·2	85·2	87·3	89·7	85·6	87·3	80·2	75·0	77·1	82·2	80·3	81·6	75·2	*69·1*	*72·5*
30	90·7	85·1	*86·9*	91·9	84·9	88·1	89·3	81·1	85·3	80·7	75·0	77·5	80·3	74·2	77·3	77·3	73·7	75·9
31	90·3	85·1	87·6	93·9	82·8	87·9				80·6	*74·2*	*77·0*				77·0	75·5	76·4
Mean	96·5	87·1	91·7	91·8	85·2	88·2	91·9	84·7	88·1	87·1	80·6	83·8	82·8	77·3	80·3	81·0	76·3	78·9
									Annual	86·2	79·6	82·8						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

166 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	63·5	4·0	79·8	6·0	79·3	8·5	87·0	7·2	78·1	9·3	83·2	11·0	69·5	16·6	84·2	15·8	87·3	14·5	84·0	11·1	74·7	6·6	88·7	7·6
2	65·7	*3·4*	73·6	5·0	79·7	9·0	*91·3*	8·6	74·3	8·9	73·7	8·9	61·7	16·3	73·4	14·0	84·2	17·3	88·5	11·6	79·0	6·7	*97·4*	8·3
3	75·0	3·8	76·6	*4·7*	83·3	8·2	84·7	8·4	61·0	5·7	83·7	9·9	65·5	15·6	77·7	14·9	83·9	*19·9*	82·0	11·3	79·6	6·5	95·1	8·0
4	*59·5*	3·5	83·6	5·1	86·3	7·3	83·5	8·3	*55·8*	5·7	80·2	15·0	*55·0*	*11·0*	84·8	16·4	83·8	18·3	90·3	14·3	72·8	5·9	93·5	9·5
5	72·5	4·6	87·7	4·8	80·7	6·8	85·1	8·0	66·6	7·1	88·4	13·8	57·0	12·0	69·3	10·9	86·5	17·6	91·3	16·3	76·6	6·1	85·1	9·0
6	85·4	5·1	88·5	6·6	89·8	7·8	64·1	5·3	62·1	6·1	83·5	13·3	56·5	13·1	*68·6*	*10·7*	82·7	15·6	92·0	*16·6*	85·3	8·8	86·8	10·0
7	84·7	4·8	90·7	8·6	*94·1*	7·9	58·8	4·8	59·3	5·8	82·6	13·3	60·7	15·5	69·6	11·1	66·0	11·2	*93·7*	16·1	74·4	7·3	78·2	6·6
8	86·2	5·8	89·7	10·5	77·3	8·3	63·0	5·3	59·7	5·6	*93·3*	14·6	66·2	18·2	89·5	13·9	79·3	12·9	90·9	15·8	81·9	6·7	83·3	6·5
9	79·9	5·1	90·3	*10·9*	88·2	7·4	59·7	*4·8*	57·8	*5·6*	92·3	14·3	70·4	18·9	80·2	13·5	83·2	16·1	90·6	15·9	*68·8*	5·9	88·7	9·8
10	82·4	6·1	83·7	8·7	83·7	7·6	67·4	5·5	60·1	5·9	90·0	11·6	65·9	18·1	77·7	15·3	75·6	13·8	83·5	14·2	85·0	10·1	94·4	*12·6*
11	85·8	7·2	92·3	7·6	80·7	7·3	75·0	7·4	60·7	6·6	63·1	*8·5*	63·0	19·9	92·3	*17·3*	74·2	13·0	76·3	10·5	88·3	11·4	80·9	10·5
12	84·5	6·3	91·3	8·5	80·4	6·6	80·4	*10·6*	63·4	8·7	68·0	9·8	76·6	*20·4*	71·0	12·4	81·5	12·8	81·5	8·9	87·3	10·5	83·3	10·2
13	91·2	6·3	91·1	8·5	*62·0*	5·6	76·5	9·3	66·0	9·3	64·5	9·2	80·3	18·8	87·3	15·0	81·5	13·7	80·4	8·5	94·0	9·4	85·0	9·2
14	92·6	6·5	78·4	8·1	66·4	7·0	77·7	9·2	72·5	9·1	82·1	12·3	68·8	14·7	72·1	13·0	82·4	13·5	88·8	10·9	92·9	8·8	92·2	12·5
15	86·5	5·3	83·7	7·9	86·8	7·3	71·9	8·0	66·0	6·3	68·6	12·9	84·7	16·0	92·0	16·0	*64·2*	9·2	79·7	10·0	72·5	*5·4*	81·3	9·8
16	86·8	4·2	84·9	8·1	87·8	7·2	66·9	7·4	58·2	6·3	66·5	12·6	78·9	14·2	78·1	12·9	69·7	9·5	82·7	12·1	88·5	8·4	81·6	8·0
17	86·2	4·4	*93·3*	9·5	86·4	6·8	63·4	7·4	62·2	7·8	73·5	15·0	69·7	14·6	81·3	15·8	85·3	10·8	81·4	11·3	85·5	10·2	76·3	6·9
18	91·3	5·1	92·5	8·6	76·0	6·8	70·9	8·6	58·3	8·0	67·6	16·0	86·1	15·5	80·5	13·7	84·3	11·4	77·4	13·2	90·5	10·2	78·9	5·9
19	88·3	6·2	83·5	6·1	78·7	6·1	80·0	9·0	75·7	9·8	68·0	16·3	81·5	13·5	84·5	13·8	81·3	12·5	80·1	13·3	*96·9*	10·2	93·0	6·8
20	95·3	6·9	74·8	5·2	82·6	6·5	80·5	9·1	83·7	10·3	72·8	17·5	66·6	11·5	82·2	13·7	77·2	12·3	77·8	12·9	91·6	11·0	93·5	7·7
21	94·3	*9·0*	73·4	5·1	79·7	8·7	71·5	9·1	74·0	10·0	65·0	17·7	74·3	13·4	82·6	13·6	89·3	13·7	77·0	10·4	92·7	11·6	92·4	7·0
22	91·8	8·8	82·7	5·8	88·3	9·6	86·5	9·2	78·2	12·0	67·7	*20·8*	71·7	14·6	80·3	13·6	83·0	14·4	74·0	8·6	88·4	*11·9*	91·1	9·1
23	95·4	8·3	78·0	5·6	78·3	7·4	71·4	6·8	75·7	10·8	65·3	15·6	71·3	14·8	*95·4*	15·2	87·9	14·2	72·6	7·4	88·8	10·5	86·7	7·9
24	92·7	8·0	78·6	5·5	84·3	6·8	65·8	5·6	81·3	10·4	64·5	15·2	69·3	15·3	81·5	14·5	87·2	16·1	75·9	7·8	92·3	11·6	*76·0*	8·8
25	95·4	7·9	*70·3*	5·0	87·2	9·9	*56·0*	5·5	83·9	10·8	64·2	15·5	70·6	18·1	87·8	16·9	90·1	16·7	82·9	8·7	87·6	10·3	77·2	8·1
26	93·2	7·0	74·3	4·9	86·2	*10·0*	59·9	5·9	88·6	11·0	62·3	13·7	*91·1*	20·0	72·6	13·0	*91·1*	17·7	*71·3*	7·3	91·0	8·1	86·1	6·3
27	93·4	6·6	91·3	9·3	85·9	9·4	59·0	5·4	79·7	10·5	*58·3*	12·0	71·4	15·2	77·7	12·9	82·4	18·2	76·5	7·8	82·6	9·6	84·1	6·8
28	*97·1*	8·4	82·5	9·7	92·6	9·4	60·2	5·9	67·2	10·7	71·0	14·8	78·3	16·9	77·6	13·7	87·3	16·4	65·3	7·5	95·5	11·7	77·9	*5·0*
29	92·7	6·8			71·9	5·7	70·0	7·1	81·7	11·7	59·7	13·0	79·5	14·8	79·7	13·0	85·9	14·0	63·8	*5·2*	90·1	10·1	90·8	5·3
30	92·0	7·1			64·1	*4·7*	68·2	8·3	*89·2*	*12·9*	68·3	13·6	86·8	13·8	75·6	13·0	81·5	11·7	72·3	6·1	78·3	6·5	92·0	6·9
31	94·0	7·3			64·5	4·9			88·8	11·7			83·4	13·8	78·8	13·4			77·7	6·3			91·8	7·2
Mean*	86·3	6·1	83·6	7·1	81·1	7·5	71·9	7·4	70·6	8·7	73·1	13·6	72·0	15·6	80·2	14·0	82·0	14·3	80·7	10·9	85·1	8·9	86·6	8·2

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

167 KEW OBSERVATORY: h_t = 3·0 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	87·3	88·0	87·7	87·7	88·3	87·8	88·5	88·4	*88·8*	88·5	87·9	85·3	84·4	82·4	*81·3*	82·2	81·9	83·0	84·7	86·7	86·8	87·5	88·2	87·8	88·3	86·3
Feb.	88·2	88·8	90·1	89·6	89·5	90·1	*90·4*	90·3	89·2	88·3	84·5	79·5	76·5	74·4	72·3	*70·8*	72·6	75·2	78·1	81·7	84·3	86·3	87·0	88·3	88·4	83·6
Mar.	87·5	87·8	89·3	88·5	89·7	89·8	*90·0*	89·9	88·0	85·0	81·4	76·1	72·1	69·7	68·0	*67·0*	68·4	71·0	74·1	78·4	80·7	83·2	84·4	85·9	87·3	81·1
Apr.	78·4	78·7	79·9	81·4	81·9	82·8	*83·3*	81·0	77·7	72·3	68·6	64·4	62·3	60·8	60·4	*59·3*	61·1	61·8	63·4	67·1	70·6	73·9	76·0	77·9	78·6	71·9
May	78·7	80·5	82·1	83·2	84·5	*84·9*	82·6	78·2	72·8	68·0	64·6	61·7	59·7	58·1	57·4	*56·7*	58·0	59·5	60·8	64·6	69·7	74·2	76·5	77·8	79·3	70·6
June	82·5	83·2	83·0	84·8	*85·7*	*85·7*	82·0	78·5	74·7	71·5	68·8	65·2	63·8	63·7	62·8	*61·0*	61·2	61·4	63·0	66·1	70·6	75·7	77·9	81·0	82·0	73·1
July	82·2	83·7	85·0	86·3	86·3	*86·4*	83·0	78·3	73·8	69·1	65·1	62·5	60·4	59·2	58·9	59·0	*58·3*	60·2	60·7	64·5	70·3	75·5	78·8	80·9	82·5	72·0
Aug.	88·3	88·6	89·9	90·4	90·6	*91·0*	90·0	88·2	84·7	80·0	75·2	71·5	69·4	67·8	*66·2*	66·8	68·1	70·4	71·7	76·5	81·2	83·9	86·2	88·1	88·5	80·2
Sept.	89·0	89·7	90·6	90·2	90·0	90·9	*91·4*	90·0	86·8	83·7	78·9	74·5	72·4	69·9	*68·3*	68·4	69·1	71·7	76·0	82·0	84·5	85·6	86·4	87·7	88·8	82·0
Oct.	86·3	87·9	87·6	87·9	88·5	*89·4*	89·3	89·0	87·5	83·8	79·3	74·0	69·3	68·7	*66·6*	67·2	69·1	73·9	77·6	79·8	81·8	83·1	84·5	85·4	86·2	80·7
Nov.	87·3	87·3	87·6	88·3	88·7	89·1	89·3	*89·6*	89·3	87·4	85·8	83·0	79·5	*77·0*	*77·0*	77·6	79·3	82·1	83·7	85·7	86·0	86·9	87·2	87·9	87·2	85·1
Dec.	88·7	88·7	89·8	*90·4*	90·4	*90·4*	90·0	89·6	89·4	89·0	87·4	84·9	82·3	79·7	*79·5*	80·5	82·3	84·2	85·5	85·6	86·4	86·9	87·6	88·1	89·0	86·6
Annual	85·4	86·1	86·8	87·4	87·8	*88·2*	87·5	85·9	83·5	80·5	77·3	73·5	71·0	69·3	68·2	*68·0*	69·1	71·2	73·3	76·5	79·4	81·9	83·4	84·7	85·5	79·4

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

168 KEW OBSERVATORY: h_t = 3·0 m. 1941

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·9	6·0	5·9	5·9	5·9	*5·8*	5·9	5·9	6·0	6·0	*6·1*	6·1	6·1	6·0	6·0	6·0	5·9	5·9	6·0	6·0	6·0	6·0	6·0	6·0	6·0	6·0
Feb.	6·9	6·9	6·9	6·9	6·8	6·8	6·9	6·9	6·9	7·0	7·0	6·9	6·9	6·9	6·8	*6·7*	6·8	6·8	6·9	7·0	7·0	7·1	7·0	*7·1*	7·0	6·9
Mar.	7·5	7·4	7·4	7·2	7·2	7·2	*7·1*	7·1	7·1	7·2	7·4	7·4	7·3	7·4	7·4	7·4	7·4	7·4	7·4	7·5	7·5	*7·5*	7·4	7·4	7·4	7·3
Apr.	7·2	7·1	7·0	7·0	*7·0*	7·0	7·1	7·2	*7·4*	7·3	7·3	7·2	7·2	7·2	7·3	7·2	7·2	7·2	7·2	7·3	*7·3*	7·3	7·3	7·3	7·3	7·2
May	8·4	8·3	8·3	8·1	*8·1*	8·1	8·3	8·4	8·4	8·3	8·4	8·3	8·3	8·4	8·4	8·4	8·5	8·6	8·6	8·7	8·7	*8·8*	8·7	8·5	8·5	8·4
June	13·2	12·9	12·6	12·5	*12·3*	12·4	12·5	12·6	12·7	13·0	13·1	13·1	13·4	13·8	14·1	14·1	14·1	14·2	14·2	*14·2*	14·1	14·1	13·8	13·7	13·3	13·4
July	15·7	15·5	15·2	14·9	14·6	14·7	14·8	14·9	*14·0*	15·1	15·1	15·1	15·1	15·2	15·3	15·4	15·5	15·8	15·7	15·9	16·1	*16·2*	16·0	16·0	15·7	15·4
Aug.	14·0	13·9	13·8	13·6	13·6	13·4	13·4	13·6	13·8	13·7	13·6	13·4	*13·4*	13·5	13·5	13·8	13·8	14·0	14·0	14·1	14·2	14·2	14·2	*14·2*	14·0	13·8
Sept.	14·0	13·8	13·7	13·5	*13·3*	13·3	13·4	13·6	13·7	14·1	14·1	14·1	14·2	14·2	14·3	14·5	14·5	14·6	14·6	*14·7*	14·6	14·6	14·3	14·1	13·9	13·8
Oct.	10·4	10·4	10·3	10·3	10·2	10·3	10·3	10·3	10·4	10·6	*10·7*	10·6	10·4	10·5	10·3	10·4	10·4	10·6	10·6	10·6	10·6	10·5	10·4	10·3	*10·2*	10·4
Nov.	8·5	8·4	8·4	8·5	*8·4*	8·5	8·5	8·6	8·5	8·7	9·0	*9·1*	9·0	8·9	8·9	8·9	8·9	9·0	8·9	8·9	8·8	8·7	8·7	8·6	8·5	8·8
Dec.	7·9	7·9	8·0	8·1	8·0	8·0	8·0	7·9	7·9	7·9	8·0	8·0	8·1	8·0	8·0	8·1	8·1	8·2	*8·2*	8·1	8·1	8·1	8·0	8·0	8·0	8·0
Annual	9·5	9·5	9·4	9·3	9·3	*9·3*	9·3	9·4	9·5	9·6	9·7	9·6	9·7	9·7	9·7	9·7	9·8	9·8	9·9	9·9	*10·0*	9·8	9·7	9·7	9·6	9·6

* Mean of values, 1,2,.....23,½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

169 KEW OBSERVATORY: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 5·5 m. + 0·53 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	2·1	1·9	1	0·3	0·2	...	*10·6*	*8·7*	10	1·1	3·2	...	...	...	...
2	...	...	...	...	...	...	6·3	4·6	8	7·4	4·4	3	4·9	2·6	11	...	...	...
3	0·1	0·4	...	0·4	1·7	...	3·4	0·9	23	1·5	1·5	...	...	...	...	1·9	3·0	6
4	...	...	...	0·3	1·4	...	...	...	...	5·7	1·8	15	...	...	...	1·0	0·7	6
5	...	...	...	4·7	5·2	...	...	...	...	0·4	0·5	...	...	...	...	4·9	3·9	*43*
6	0·9	4·4	...	1·5	3·0	...	*22·4*	*16·7*	3	...	...	...	...	...	...	0·9	3·3	...
7	0·1	...	...	3·3	3·5	8	14·7	*19·5*	15	...	...	...	...	...	...	4·9	2·9	15
8	0·5	1·0	...	1·7	1·7	3	2·3	2·0	2	...	...	...	...	...	...	4·0	2·4	16
9	...	...	...	2·4	2·2	2	0·8	0·8	...	...	...	...	...	...	...	*16·2*	9·1	7
10	0·2	0·2	...	0·6	0·9	...	2·4	1·8	5	...	...	...	...	...	...	15·1	*12·5*	8
11	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	4·8	3·4	7	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	2·4	2·6	2	...	...	...	...	...	...	...	...	...	...	...	...
14	0·6	0·5	3	1·3	1·5	2	...	...	...	...	...	...	0·7	1·1	13	...	...	...
15	2·3	5·5	...	0·3	0·3	...	...	...	...	...	...	...	1·0	2·2	1	...	...	...
16	...	...	...	4·5	3·0	2	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	1·8	3·2	...	...	...	...	...	...	...	...	...	...	...	...	...
18	8·7	10·2	7	2·9	3·9	...	...	...	...	7·0	2·4	14	0·6	1·0	2	...	...	...
19	1·1	0·4	6	5·7	*7·5*	1	...	...	...	3·7	2·8	...	...	...	...	...	...	...
20	*18·6*	*15·1*	*9*	0·2	0·2	...	...	...	...	7·1	2·0	*37*	...	...	...	...	...	...
21	5·2	6·4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	0·5	0·9	2	0·7	1·6	...	0·9	3·1	1	...	...	...	0·8	0·4	8	...	...	...
23	0·3	0·5	...	...	...	...	0·9	1·7	2	...	...	...	4·3	2·9	*82*	...	...	...
24	...	...	...	...	...	...	0·1	0·1	...	...	...	...	5·2	4·6	4	...	...	...
25	8·7	10·7	2	...	...	...	7·8	8·2	2	...	...	...	6·2	*6·6*	16	...	...	...
26	0·1	...	...	...	...	...	12·1	5·7	9	...	...	...	*12·9*	5·7	26	...	...	...
27	5·7	7·7	2	*6·2*	6·2	2	0·2	...	...	...	...	...	1·8	0·7	33	...	...	...
28	6·9	8·7	1	1·2	0·6	*26*	6·9	2·5	*41*	...	...	...	...	...	...	...	...	...
29	...	...	...				...	...	...	...	...	...	5·4	4·1	2	...	...	...
30	0·1	0·1	...				...	...	...	0·3	1·2	12	2·6	2·5	2	...	...	...
31	1·7	2·6	3				...	...	...				...	...	...			
Total	62·4	75·3	-	49·0	55·5	-	81·5	67·8	-	43·7	25·3	-	47·5	37·6	-	48·9	37·8	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·4	*9·3*	2
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2	...	...
4	...	...	...	27·6	5·2	*126*	...	...	...	0·3	0·8	...	1·5	2·0	8	...	...	...
5	...	...	...	0·5	0·3	7	...	...	...	0·3	0·8	...	...	...	...	0·1	0·5	2
6	...	...	...	0·8	0·9	6	...	...	...	...	...	...	...	...	...	*11·2*	5·8	19
7	...	...	...	...	...	...	...	...	...	...	...	...	3·2	1·8	*28*	6·1	3·3	8
8	0·9	0·2	9	9·7	7·1	5	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	5·9	3·2	13	...	...	...	2·0	3·2	4	...	...	...	...	...	...
10	...	...	...	2·4	4·0	...	...	...	...	3·3	3·1	6	5·9	3·0	26	...	...	...
11	...	...	...	10·1	4·7	24	...	...	...	*4·4*	2·6	3	*16·1*	7·7	8	1·5	1·2	8
12	15·4	1·6	52	...	...	...	0·1	0·3	...	...	...	...	6·7	6·2	4	2·8	1·6	*30*
13	14·3	1·1	51	4·0	5·5	1	...	...	...	...	...	...	12·5	*14·2*	3	0·1	0·1	1
14	1·4	1·1	3	...	...	...	...	...	...	3·0	*3·8*	5	0·1	0·2	...	9·9	6·6	15
15	7·9	3·5	20	16·5	5·1	53	...	...	...	...	...	...	...	...	...	...	...	...
16	0·3	0·5	...	...	...	...	...	...	...	0·2	0·6	...	2·2	3·8	3	...	...	...
17	...	...	...	2·2	1·0	21	...	...	...	0·2	0·6	...	3·1	1·9	23	...	...	...
18	8·2	*9·4*	17	*29·2*	5·9	17	...	...	...	0·2	0·3	...	...	...	...	...	...	...
19	9·9	5·2	8	5·9	2·7	27	...	...	...	0·8	2·3	...	...	...	...	...	...	...
20	...	...	...	0·8	0·3	2	...	...	...	1·7	0·8	6	0·1	0·1	...	...	...	...
21	...	...	...	2·5	1·1	13	...	...	...	...	...	...	1·4	1·6	1	...	...	...
22	...	...	...	...	...	...	...	...	...	0·2	0·3	10	3·8	3·4	11	0·4	0·7	1
23	...	...	...	22·6	*10·6*	49	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	0·6	0·4	2	0·1	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	0·7	1·1	4	3·4	2·3	26	...	...	...
26	*30·6*	8·5	*78*	...	...	...	0·2	0·5	...	0·2	0·5	...	...	...	...	...	...	...
27	0·2	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...	0·9	1·6	3
28	2·0	1·7	1	3·1	2·2	16	*5·8*	*4·5*	*51*	1·0	0·2	*37*	3·9	8·2	...	...	...	...
29	5·6	2·7	7	5·9	0·8	101	2·6	3·1	3	0·3	0·4	7	0·2	0·5	...	...	...	...
30	6·5	3·2	32	...	...	...	0·1	0·1	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...				...	...	...				...	...	...
Total	103·2	38·8	-	149·7	60·6	-	8·8	8·5	-	19·4	21·8	-	64·2	56·9	-	39·6	30·7	-

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

170 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	0·2	1·2	1·5	1·5	1·2	0·9	3·2	6·1	7·6	4·2	2·7	2·0	2·8	4·4	4·8	2·8	3·2	1·6	0·8	1·0	1·4	2·3	3·8	1·2	62·4
Feb.	3·3	3·9	3·5	1·7	3·8	2·7	2·0	1·7	1·0	2·9	1·7	0·1	0·1	0·2	1·0	0·1	0·1	0·9	1·5	1·3	3·0	3·9	*5·1*	3·5	49·0
Mar.	2·9	2·8	2·6	2·2	2·1	3·1	2·8	4·0	5·3	5·0	1·7	0·3	1·6	2·0	1·9	4·0	5·1	5·9	*6·8*	2·8	4·9	4·6	3·7	3·4	81·5
Apr.	2·0	2·5	···	0·9	0·8	1·4	1·4	1·2	1·3	2·5	1·7	0·5	1·8	2·1	1·8	3·7	*8·2*	2·0	2·8	0·6	0·1	0·9	2·6	0·9	43·7
May	0·6	1·0	1·3	1·1	1·1	3·0	3·0	0·9	0·4	0·4	1·1	0·6	0·6	2·2	0·4	1·6	3·1	*6·7*	5·5	6·0	2·8	3·4	0·5	0·2	47·5
June	1·6	4·1	5·5	1·9	0·9	0·2	1·1	1·6	0·7	0·5	0·7	1·3	1·4	3·5	4·2	*5·7*	5·2	3·0	2·0	0·3	1·5	0·1	1·2	0·7	48·9
July	1·3	2·1	0·6	1·1	2·7	3·6	11·7	1·0	0·3	0·6	10·4	9·7	3·1	9·5	9·1	3·8	5·1	4·4	*14·3*	3·1	1·0	0·6	2·5	1·6	103·2
Aug.	2·6	1·1	5·3	8·5	6·7	8·1	8·2	6·5	4·7	12·2	7·8	3·8	6·4	4·2	5·1	8·4	11·5	*15·9*	1·6	5·4	6·1	3·6	2·6	3·4	149·7
Sept.	0·8	1·2	0·5	0·1	···	···	···	···	0·1	···	···	0·9	0·4	···	0·2	···	···	···	0·1	0·6	*2·1*	1·7	···	0·1	8·8
Oct.	···	0·6	0·5	2·4	*3·7*	2·1	1·5	2·1	2·2	0·7	0·5	1·0	0·5	0·2	···	···	0·7	0·5	0·1	···	···	0·1	···	···	19·4
Nov.	*7·1*	1·8	0·6	0·7	1·6	0·6	2·9	4·1	2·8	3·0	1·6	0·9	1·0	3·6	3·7	1·5	1·6	2·3	2·1	0·8	2·2	5·7	6·8	5·2	64·2
Dec.	2·6	1·6	1·6	0·5	0·1	0·1	0·2	0·2	1·0	2·2	0·6	2·1	3·2	0·7	1·4	1·7	2·8	1·8	1·4	2·3	1·8	1·2	1·5	*7·0*	39·6
Annual	25·0	23·9	23·5	22·6	24·7	25·8	38·0	29·4	27·4	34·2	30·5	23·2	22·9	32·6	33·6	33·3	*46·6*	45·0	39·0	24·2	26·9	28·1	30·3	27·2	717·9

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

171 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	0·2	1·4	2·4	2·1	2·4	2·2	3·0	5·4	*6·5*	5·0	4·4	3·1	4·1	4·7	5·2	3·5	2·6	2·3	1·7	2·8	2·4	2·8	3·3	1·8	75·3
Feb.	4·3	4·0	*4·6*	1·7	3·5	4·3	3·0	2·4	1·7	3·1	1·8	0·3	0·2	0·3	0·6	0·1	0·1	0·4	1·8	2·3	3·0	4·3	4·4	3·3	55·5
Mar.	3·1	2·9	3·0	3·1	2·8	2·4	3·3	4·1	*4·8*	4·1	2·0	1·0	1·6	1·6	1·6	2·6	2·9	2·7	3·1	2·9	3·1	3·8	2·9	2·4	67·8
Apr.	0·7	0·3	···	0·7	1·4	1·4	1·0	1·1	1·3	2·1	1·7	0·4	0·9	*1·8*	0·7	1·4	1·7	1·0	1·5	0·5	0·1	0·5	1·7	1·4	25·3
May	0·5	1·3	1·5	1·4	1·6	1·6	3·1	1·7	0·6	0·2	0·3	0·2	0·3	0·5	0·7	0·8	3·0	2·9	3·6	*4·0*	3·4	3·2	1·1	0·1	37·6
June	1·3	2·0	2·4	2·4	1·1	0·9	1·4	1·3	1·0	1·0	0·9	2·0	1·5	*3·0*	2·3	2·8	2·5	1·4	1·7	0·9	1·0	0·6	1·2	1·2	37·8
July	0·6	1·8	0·6	1·3	1·2	0·5	1·3	1·3	0·5	0·3	1·1	0·8	2·1	3·1	*4·2*	3·4	2·9	2·8	2·2	2·4	1·3	0·4	1·3	1·4	38·8
Aug.	1·4	1·2	1·9	2·6	2·5	3·1	*4·0*	3·2	3·2	3·2	3·5	2·5	3·2	1·9	2·0	2·6	3·3	1·9	1·1	3·3	2·7	2·9	2·5	0·9	60·6
Sept.	0·8	1·0	1·0	0·3	···	···	···	···	0·4	···	···	0·5	0·5	···	0·2	···	···	···	0·3	1·0	*1·3*	0·7	···	0·5	8·5
Oct.	···	0·8	0·8	1·4	*2·7*	*2·7*	2·3	1·2	2·1	0·9	1·4	1·6	0·9	0·6	···	···	0·7	1·1	0·2	0·1	···	0·3	···	···	21·8
Nov.	2·8	2·8	1·4	1·1	1·7	1·5	1·9	2·5	2·0	2·0	2·1	2·6	1·9	*4·1*	3·5	2·3	2·1	2·9	2·7	1·8	2·2	3·1	3·1	2·8	56·9
Dec.	1·0	1·2	1·3	0·6	···	0·1	0·4	0·4	1·7	1·8	0·7	1·2	1·0	0·8	1·5	1·4	1·9	2·0	1·7	*2·3*	2·1	2·0	1·7	1·9	30·7
Annual	16·7	20·7	20·9	18·7	20·9	20·7	24·7	24·6	*25·8*	23·7	19·9	16·2	18·2	22·4	22·5	20·9	23·7	21·4	21·6	24·3	22·6	24·6	23·2	17·7	516·6

NOTES ON RAINFALL

172 KEW OBSERVATORY 1941

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": June 11–July 7; August 30–September 25
"Partial drought": June 11–July 11; August 30–September 27
"Dry spell": June 11–July 11; August 30–September 27; December 15–31

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

No "rain spells" or "wet spells" occurred in 1941

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	49	27	58	20	5

Continuous or Heavy Falls

The fall of the longest duration occurred on March 6 when 13 mm. fell in 11 hr.; on December 1, 6 mm. fell in 10 hr.: August 23, 21 mm. in 9h. 55m.: December 11-12, 20 mm. fell in 9h. 55m.

Heavy Falls in short periods

On August 4, 5 mm. fell in 4 min.; 10 mm. in 11 min. and 15 mm. in 39 min. On July 26, 5 mm. fell in 7 min., 10 mm. in 26 min.

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 126 mm./hr. at 17h. 40m. on August 4
Rates exceeding 50 mm./hr. were recorded on May 23, July 12,13,26: August 4,15,29 and September 28

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

173 KEW OBSERVATORY: h_g(height of recorder above ground) = 13·3 m. 1941

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	3·4	43	230	0·8	9	90	4·6	42	480	···	···	···	0·7	5	90	6·6	41	630
2	*5·5*	*70*	210	0·9	10	100	4·0	37	500	···	···	···	2·5	17	280	0·2	1	20
3	2·4	30	260	0·8	9	100	3·5	32	490	6·0	46	540	8·6	58	760	···	···	···
4	0·2	3	10	0·4	4	50	5·7	52	600	6·0	46	280	*13·3*	*89*	2260	7·5	46	840
5	···	···	···	···	···	10	7·5	68	720	1·3	10	100	3·8	25	290	···	···	···
6	···	···	···	1·9	20	170	···	···	···	···	···	···	3·2	21	460	···	···	20
7	···	···	···	1·2	2	80	···	···	···	0·2	1	···	5·2	34	580	4·5	27	920
8	···	···	···	···	···	···	3·3	29	220	3·8	29	340	3·4	22	440	0·2	1	20
9	2·0	25	210	···	···	···	···	···	30	2·3	17	260	7·8	51	980	0·3	2	30
10	3·8	47	370	5·9	60	*780*	3·3	29	330	3·2	24	320	8·7	57	1280	···	···	···
11	···	···	···	1·2	12	130	4·0	35	410	0·9	7	150	10·7	70	1080	10·1	61	1890
12	···	···	···	···	···	10	···	···	···	0·2	1	30	8·0	52	1060	5·8	35	530
13	0·5	6	30	2·4	24	240	*9·5*	*82*	*1380*	0·2	1	50	0·6	4	60	7·6	46	720
14	···	···	···	0·3	3	70	7·4	63	810	0·1	1	30	···	···	···	0·6	4	40
15	···	···	···	5·8	58	750	4·2	36	360	6·5	47	1000	4·3	28	380	8·1	49	1240
16	2·7	33	270	···	···	10	1·7	14	60	8·4	60	1080	12·5	80	*2330*	14·5	88	*2940*
17	4·6	55	*410*	···	···	10	···	···	···	*10·6*	*76*	1520	10·2	65	1740	*15·0*	*91*	2640
18	···	···	···	···	···	···	8·2	69	1090	0·4	3	100	7·6	49	830	10·8	65	1590
19	0·2	2	30	1·0	10	60	4·9	41	350	2·6	19	300	2·0	13	160	11·6	70	1300
20	···	···	···	2·0	19	200	3·7	31	260	6·3	45	900	···	···	10	8·6	52	660
21	···	···	···	*6·6*	*64*	690	1·6	13	220	7·2	51	720	7·0	44	690	11·4	69	1610
22	0·9	11	110	1·8	17	190	···	···	···	5·8	41	590	5·2	33	490	13·8	83	1790
23	···	···	···	6·4	61	660	1·7	14	200	0·6	4	60	3·1	19	420	12·4	75	1770
24	···	···	···	4·0	38	330	0·2	2	80	2·6	18	210	1·8	11	330	8·0	48	890
25	···	···	···	5·9	56	610	1·5	12	160	6·4	44	770	0·7	4	130	14·2	86	1880
26	···	···	···	3·6	34	490	0·7	6	110	10·3	71	*1560*	2·2	14	410	9·0	54	900
27	···	···	···	···	···	···	4·8	38	520	0·2	1	10	5·1	32	720	11·0	66	1250
28	···	···	···	0·7	6	90	···	···	···	0·4	3	30	11·0	68	1630	1·6	10	210
29	···	···	···				···	···	···	0·7	5	50	···	···	20	12·8	77	2040
30	···	···	···				5·8	46	580	2·7	18	410	···	···	10	8·6	52	1130
31	···	···	···				4·6	36	670				···	···	30			
Mean	0·85		70	1·88		210	3·11		340	3·20		380	4·81		640	7·16		980

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	12·1	73	–	0·3	2	40	1·8	13	220	1·1	9	200	1·5	16	160	···	···	···
2	13·0	79	–	7·2	47	1310	7·0	52	1080	6·5	56	1090	0·1	1	20	···	···	···
3	11·5	70	2040	6·3	41	890	4·0	30	460	7·2	63	960	1·7	18	150	0·8	10	50
4	10·2	62	1900	1·2	8	110	7·3	55	1000	···	···	···	···	···	10	···	···	···
5	13·7	84	2410	9·0	59	1560	2·9	22	260	···	···	···	5·1	54	490	···	···	···
6	*15·3*	*93*	*3150*	6·0	40	770	···	···	···	6·2	55	880	···	···	···	···	···	···
7	15·2	*93*	3020	6·1	41	1120	*10·5*	*80*	*2110*	3·4	30	260	*6·4*	*69*	*780*	4·4	55	410
8	10·6	65	1420	···	···	···	2·9	22	260	1·7	15	180	3·8	41	320	3·3	42	410
9	9·8	60	1310	6·1	41	750	4·6	35	460	···	···	···	2·8	31	310	···	···	···
10	12·7	78	1150	6·7	45	990	0·1	1	50	1·4	13	140	0·2	2	···	···	···	···
11	10·6	65	1250	2·6	18	500	5·9	46	710	3·8	35	410	···	···	···	2·5	32	260
12	9·0	55	1410	9·9	67	1900	0·4	3	80	7·1	65	940	0·6	7	···	2·5	32	220
13	6·3	39	1040	···	···	···	1·0	8	110	5·0	46	680	···	···	···	···	···	···
14	6·2	38	1260	5·0	34	830	0·2	2	20	0·6	6	110	···	···	···	···	···	···
15	2·6	16	350	0·1	1	20	0·2	2	20	5·1	48	700	1·9	21	180	3·3	42	300
16	0·7	4	90	11·4	78	1840	6·8	54	770	1·3	12	160	···	···	···	*5·3*	*68*	*680*
17	6·8	42	1220	7·2	50	1110	8·3	66	640	3·7	35	470	···	···	40	0·4	5	40
18	···	···	···	7·9	55	1280	7·5	60	590	0·2	2	60	2·1	24	280	1·4	18	160
19	3·1	19	620	8·1	56	1450	0·1	1	10	1·2	11	140	···	···	···	···	···	60
20	12·3	77	1980	6·7	47	970	4·1	33	400	1·9	18	260	···	···	10	···	···	···
21	3·6	23	–	8·7	61	1140	3·2	26	350	7·8	76	1300	1·7	20	180	···	···	30
22	11·0	69	–	3·8	27	230	6·5	53	550	4·4	43	490	3·8	45	400	···	···	10
23	9·9	63	–	···	···	···	4·1	34	340	*8·6*	*84*	*1320*	6·1	72	770	3·6	46	320
24	13·9	88	2570	4·8	34	690	3·5	29	350	4·5	44	590	···	···	10	2·9	37	360
25	6·3	40	1020	1·3	9	150	3·7	31	380	···	···	···	···	···	···	0·7	9	80
26	···	···	10	9·0	65	1260	0·1	1	40	2·7	27	260	0·7	8	70	···	···	10
27	7·6	49	1550	4·3	31	510	8·1	68	1200	3·1	31	270	···	···	···	···	···	···
28	6·8	44	1360	6·2	45	920	2·0	17	210	3·0	30	250	···	···	···	4·9	63	590
29	0·1	1	40	4·3	31	690	1·5	13	230	6·7	68	990	···	···	···	···	···	130
30	2·9	19	370	7·6	56	1100	4·8	41	580	3·6	37	400	···	···	···	···	···	30
31	0·4	3	60	*11·9*	*87*	*2220*				2·4	25	160				···	···	···
Mean	7·88		1250†	5·47		850	3·77		450	3·36		440	1·28		140	1·16		130
								Annual Mean		3·67		480						

See Introduction for corrections to tabulated values of radiation.

† 26 days only. Instrument under repair July 1–2: 21–23.

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

174 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1941

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Totals	Per cent. of possible
									hours											%
Jan.	–	–	–	–	···	···	1·4	3·3	4·8	6·5	6·7	3·1	0·4	···	–	–	–	–	26·2	10
Feb.	–	–	–	···	0·3	4·3	8·5	*8·9*	8·0	8·4	6·3	4·7	2·9	0·3	···	–	–	–	52·6	19
Mar.	–	–	···	0·3	4·0	6·6	9·8	11·0	12·4	*13·3*	12·3	11·1	9·8	5·2	0·6	···	–	–	96·4	26
Apr.	–	···	1·0	4·4	7·6	9·7	*11·2*	10·2	8·8	8·3	8·5	8·1	5·8	6·7	4·9	0·7	···	–	95·9	23
May	···	0·3	7·1	11·6	*15·7*	14·3	13·4	12·2	11·8	8·6	10·2	10·8	9·9	7·7	9·9	5·7	···	···	149·2	31
June	···	2·6	10·6	13·9	15·0	14·7	14·8	15·2	*17·9*	17·3	17·2	16·9	14·6	15·2	13·9	10·9	4·1	···	214 8	43
July	···	2·6	13·3	*20·0*	19·6	19·3	18·2	18·9	18·7	18·5	18·1	17·7	16·9	14·7	14·4	10·1	3·2	···	244·2	49
Aug.	–	···	4·2	10·9	13·6	*17·2*	15·5	13·7	13·8	14·6	15·2	15·4	11·6	9·0	10·7	4·2	0·1	–	169·7	38
Sept.	–	–	···	0·7	3·9	7·5	9·5	11·9	11·1	15·0	15·8	15·1	13·6	7·6	1·4	···	–	–	113·1	30
Oct.	–	–	–	···	2·1	9·4	12·4	*16·7*	15·0	13·6	10·4	11·9	9·6	3·1	···	–	–	–	104·2	31
Nov.	–	–	–	–	0·1	2·1	5·7	6·7	*7·3*	5·9	5·4	4·1	1·2	···	–	–	–	–	38·5	14
Dec.	–	–	–	–	···	0·1	5·0	7·8	*8·5*	7·1	5·2	2·2	0·1	···	–	–	–	–	36·0	15
Annual	···	5·5	36·2	61·8	81·9	105·2	125·4	136·5	*138·1*	137·1	131·1	121·1	96·4	69·5	55·8	31·6	7·4	···	1340·8	30

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM

Monthly and annual totals between exact hours, local apparent time

175 KEW OBSERVATORY: h_s = 13·3 m. 1941

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total
									joules per square centimetre										
Jan.	–	–	–	–	···	10	70	320	280	490	500	300	160	10	–	–	–	–	2140
Feb.	–	–	–	···	70	450	880	980	980	830	710	530	380	100	10	–	–	–	5920
Mar.	–	–	···	100	420	730	1060	1230	1480	1450	1330	1080	930	630	170	20	–	–	10630
Apr.	–	···	180	500	790	970	1430	1490	1100	950	990	1100	730	610	450	120	···	–	11410
May	···	150	820	1480	2220	2020	1720	1840	1610	1270	1320	1510	1270	1130	950	550	90	···	19950
June	···	340	1000	1720	2160	2360	2320	2480	2950	2580	2520	2450	1930	1840	1510	970	370	···	29500
July	···	280	1160	2260	2710	2600	2950	3220	3190	2680	2580	2410	1960	1700	1570	980	350	···	32600*
Aug.	–	40	570	1540	1950	2890	2320	2310	2580	2260	2620	2360	1820	1330	1270	480	10	–	26350
Sept.	–	–	···	140	540	780	1090	1550	1500	1700	1890	1620	1380	910	360	20	–	–	13480
Oct.	–	–	–	40	330	1060	1540	2220	2220	1790	1440	1460	1080	440	50	–	–	–	13670
Nov.	–	–	–	–	40	250	630	810	750	630	550	370	140	10	–	–	–	–	4180
Dec.	–	–	–	–	···	50	460	900	950	930	540	280	40	···	–	–	–	–	4150
Annual	···	810	3730	7780	11230	14170	16470	19350	19590	17560	16990	15470	11820	8710	6340	3140	820	···	173980

* 26 days only. Instrument under repair July 1-2; 21-23.

See Introduction for corrections to tabulated values.

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

176 KEW OBSERVATORY: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 5 m. + 23 m. 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	*7·6*	18	4·5	17	*8·1*	22	6·2	18	5·6	15	4·0	10	2·4	9	3·3	15	1·5	8	1·5	5	5·2	16	1·2	5
2	7·0	20	4·4	14	6·9	*23*	4·2	11	*6·7*	17	*6·4*	*13*	2·5	9	4·7	13	1·8	7	*0·4*	4	5·2	14	1·7	6
3	7·0	*20*	6·5	18	4·6	15	5·4	17	6·0	15	3·6	12	3·5	13	*1·1*	7	0·9	4	2·4	11	4·0	11	1·4	4
4	6·9	15	2·3	9	2·5	10	3·9	13	2·0	8	3·7	11	3·6	13	3·9	15	2·1	7	3·2	7	5·0	14	1·5	4
5	6·2	15	4·7	17	3·0	10	3·3	16	3·3	9	4·0	11	2·9	12	6·0	20	2·5	6	4·0	11	2·5	10	3·3	10
6	3·7	8	2·9	13	2·4	12	8·1	19	4·4	14	2·2	9	3·9	13	4·2	15	3·6	11	1·6	6	4·7	14	*8·9*	*22*
7	3·2	10	4·0	13	5·4	13	6·7	18	5·3	15	1·0	9	3·2	13	2·2	9	*3·9*	13	2·5	8	3·7	14	6·0	17
8	3·9	12	6·3	19	4·8	11	4·3	11	3·8	10	1·6	7	1·6	10	2·1	7	0·8	5	2·0	7	*1·2*	4	3·4	8
9	5·4	16	*8·4*	20	3·3	9	4·8	16	4·9	15	4·2	10	2·9	9	3·5	12	1·3	9	4·0	12	5·1	15	4·5	13
10	5·5	16	4·5	15	4·7	12	3·5	13	4·2	14	5·7	*16*	2·0	7	4·4	13	2·0	9	4·9	13	5·8	16	6·6	20
11	6·4	17	*1·9*	10	7·3	16	3·2	10	1·8	9	4·2	15	2·1	9	4·8	15	3·7	*16*	5·1	17	3·0	10	7·0	20
12	4·1	12	3·5	10	7·9	19	3·0	9	3·2	14	*1·4*	9	*1·5*	*16*	4·1	15	1·8	8	1·4	6	2·1	10	6·5	18
13	2·4	7	3·2	11	7·7	16	4·6	17	2·7	11	3·5	13	3·5	16	*6·5*	*20*	1·9	9	2·0	10	2·9	9	5·8	17
14	2·5	7	5·2	14	4·8	10	5·7	17	3·5	9	4·5	14	*4·8*	14	3·1	12	3·8	13	2·2	13	1·7	9	6·5	20
15	4·7	16	5·3	16	3·7	9	3·4	13	4·1	12	4·5	13	4·4	15	3·5	14	3·1	10	2·7	9	3·9	12	5·7	17
16	2·3	8	7·9	19	2·8	8	2·9	9	3·2	11	2·3	8	3·2	12	5·6	16	1·8	6	4·7	16	5·1	16	3·9	11
17	2·3	8	4·1	13	4·6	13	*2·9*	11	1·8	8	2·7	9	3·3	13	5·5	18	*0·7*	4	5·5	19	*6·9*	*20*	3·6	13
18	4·2	13	2·7	9	2·5	8	4·3	13	2·4	11	1·5	7	4·6	16	3·5	15	1·4	7	*7·7*	*24*	2·5	11	2·1	8
19	4·2	15	5·1	12	2·3	9	4·6	15	2·6	9	3·9	10	2·8	13	2·9	15	2·9	9	5·7	17	0·9	3	1·4	3
20	7·1	16	4·6	16	*2·1*	7	4·4	16	2·0	8	2·2	10	3·4	13	2·8	12	3·3	11	4·0	16	3·1	11	1·6	6
21	4·2	15	3·8	13	4·1	15	3·3	10	4·7	17	3·1	9	3·5	13	2·8	11	2·4	9	2·6	13	4·2	14	1·5	4
22	4·9	16	4·0	11	2·8	12	4·2	11	5·6	16	3·5	13	1·8	9	3·3	12	2·9	7	3·2	13	4·7	15	2·4	9
23	*2·0*	7	3·4	12	4·1	15	7·4	16	6·5	*18*	3·6	13	1·6	7	2·4	9	3·2	9	4·8	14	2·9	9	3·2	12
24	2·9	9	2·8	13	3·8	15	8·1	18	6·2	18	1·7	7	1·6	9	2·7	11	3·2	9	4·0	15	4·9	13	5·1	15
25	6·7	14	3·1	10	5·6	17	*9·8*	*23*	5·2	15	2·9	11	2·1	11	4·0	12	1·8	10	4·0	13	3·2	15	4·3	15
26	5·9	13	4·0	14	4·4	20	8·9	19	4·3	14	2·7	10	2·4	11	4·6	14	2·1	11	5·0	17	2·4	12	2·3	10
27	5·0	10	8·6	18	4·2	15	6·5	15	4·9	15	2·9	10	3·0	13	5·4	17	3·5	11	3·9	13	5·4	15	3·4	14
28	3·8	8	8·9	*21*	2·0	13	3·8	10	4·7	15	2·6	10	3·4	11	6·3	17	1·5	7	6·3	21	2·0	7	4·0	13
29	5·5	11			6·5	18	5·4	15	3·0	12	3·9	12	3·7	12	5·2	16	2·0	9	7·4	23	2·7	8	1·6	4
30	5·8	13			4·8	16	7·4	17	*1·5*	8	2·2	8	2·7	14	2·6	11	2·2	11	5·2	17	3·1	10	*1·1*	4
31	5·5	13			4·5	13			2·5	8			3·0	12	1·4	7			3·8	14			1·3	5

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

177 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1941

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·3	4·6	4·5	4·5	4·6	4·5	4·6	4·8	5·0	5·1	5·2	5·2	*5·5*	5·4	5·5	5·2	4·9	4·8	4·5	4·3	*4·3*	4·4	4·7	4·5	4·8
Feb.	4·0	4·2	*4·0*	4·1	4·0	4·1	4·2	4·3	4·4	4·7	5·3	5·6	5·8	*5·9*	5·9	5·7	5·3	4·8	4·7	4·4	4·2	4·4	4·2	4·1	4·7
Mar.	4·2	4·1	3·9	*3·6*	3·7	3·9	3·7	3·7	4·0	4·3	4·7	5·0	5·1	5·3	5·5	*5·5*	5·3	5·1	4·7	4·4	4·4	4·5	4·3	4·2	4·5
Apr.	4·5	4·3	4·2	*4·1*	4·1	4·5	4·5	4·9	5·3	5·7	6·1	6·3	6·2	*6·3*	6·2	6·0	5·6	5·5	5·3	4·9	4·9	4·9	4·7	4·5	5·1
May	3·3	3·3	2·9	2·7	*2·6*	2·8	3·3	4·0	4·3	4·4	4·6	4·6	4·9	4·9	5·0	*5·1*	4·9	4·7	4·5	4·0	3·8	3·5	3·5	3·3	4·0
June	2·5	2·7	2·6	*2·5*	2·7	2·7	2·9	3·0	3·3	3·5	3·8	3·8	3·7	3·8	3·7	*3·9*	3·8	3·8	3·7	3·3	3·1	2·9	2·6	2·5	3·2
July	2·2	2·1	1·9	*1·8*	1·8	1·9	2·1	2·6	2·9	3·4	3·7	3·9	3·9	4·1	4·1	4·0	4·0	*4·1*	3·7	2·9	2·5	2·1	2·2	2·3	2·9
Aug.	3·0	3·2	3·2	3·1	3·1	*3·0*	3·2	3·6	4·1	4·3	4·4	4·6	4·9	*5·0*	4·8	4·9	4·9	4·5	3·9	3·5	3·3	3·3	3·1	3·1	3·8
Sept.	1·9	1·7	*1·6*	1·8	1·8	1·8	1·8	1·9	2·2	2·5	2·8	3·0	*3·2*	3·1	3·1	3·1	*3·2*	2·5	2·2	2·1	2·1	2·0	2·0	2·0	2·3
Oct.	3·2	3·1	3·1	3·1	*3·0*	3·2	3·1	3·3	3·6	4·1	4·8	5·0	*5·1*	5·0	5·0	4·7	4·2	3·8	3·6	3·5	3·5	3·4	3·4	3·3	3·8
Nov.	3·3	3·3	3·5	3·4	3·4	3·3	3·4	*3·2*	3·5	3·7	4·0	4·5	*4·7*	4·5	4·0	3·8	3·7	3·6	3·6	3·5	3·6	3·6	3·6	3·4	3·7
Dec.	3·4	3·3	3·2	3·3	3·3	*3·1*	3·2	3·2	3·3	3·3	3·4	4·0	*4·2*	4·2	4·1	4·0	3·8	3·9	3·9	3·8	3·7	3·7	3·3	3·3	3·6
Annual	3·3	3·3	3·2	*3·1*	3·2	3·2	3·3	3·5	3·8	4·1	4·4	4·6	4·8	*4·8*	4·7	4·7	4·5	4·3	4·0	3·7	3·6	3·5	3·5	3·4	3·7

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

178 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1941

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	0	0	319	375	50	0	50	10	2 15	20	3 14 35
Feb.	–	0	1	1	228	394	49	0	90	11	16 10	21	28 10 55
Mar.	–	0	3	9	242	404	89	0	220	12	2 05	23	2 04 30
Apr.	–	0	3	12	303	359	46	0	50	13	25 14	23	25 12 30
May	–	0	0	0	196	451	97	0	220	10	21 16	18	23 00 55
June	–	0	0	0	76	514	130	0	90	8	4 16	16	10 07 30
July	–	0	0	0	47	564	133	0	215	8	18 10	16	12 14 00
Aug.	–	0	0	0	146	501	97	0	235	9	13 17	20	13 17 35
Sept.	–	0	0	0	12	485	223	0	330	7	11 15	16	11 14 20
Oct.	–	0	2	4	155	436	149	0	250	12	18 14	24	18 13 35
Nov.	–	0	1	1	155	449	115	0	215	11	17 11	20	17 10 45
Dec.	–	0	2	10	135	416	171	12	225	13	6 19	22	6 16 15
Year	–	0	12	37	2014	5348	1349	12	50	13	Apr. 25 14	24	Oct. 18 13 35

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (1ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

179 KEW OBSERVATORY 1941

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	77·7	79·9	76·7	78·5	78·3	78·8	78·1	79·9	81·3	81·1	85·1	83·2	91·3	87·5	90·6	89·0	88·8	88·2	87·1	87·7	79·8	84·9	79·9	82·7
2	76·2	79·9	76·1	78·6	79·1	78·8	78·3	79·9	81·7	81·0	85·5	83·3	92·1	87·4	90·6	88·9	89·1	88·2	86·7	87·6	79·9	84·5	80·1	82·6
3	75·3	79·8	75·7	78·8	79·0	78·9	78·8	79·9	81·4	81·1	84·8	83·3	92·3	87·6	90·2	88·9	90·3	88·2	86·4	87·5	79·8	84·2	79·7	82·5
4	74·9	79·8	75·3	78·7	78·5	79·1	79·3	79·9	80·7	81·2	84·7	83·3	92·4	87·6	91·0	88·9	91·0	88·2	86·7	87·4	79·7	84·1	80·0	82·3
5	74·8	79·6	74·9	78·7	77·9	79·1	79·3	79·9	81·3	81·2	86·3	83·3	91·7	87·9	90·5	88·9	91·0	88·2	87·1	87·3	79·1	84·1	80·3	82·4
6	74·6	79·4	74·8	78·6	78·2	79·1	79·4	80·0	81·4	81·2	86·1	83·6	92·1	88·0	90·0	88·9	91·0	88·3	87·4	87·2	78·8	83·8	80·6	82·2
7	74·5	79·3	74·9	78·3	78·1	79·2	78·5	79·9	81·1	81·2	86·3	83·7	92·5	88·1	89·5	88·9	90·2	88·5	87·7	87·2	79·9	83·7	80·6	82·2
8	74·5	79·1	76·2	78·3	78·7	79·2	78·2	80·0	81·0	81·2	86·9	83·9	92·8	88·1	89·5	88·8	89·6	88·5	88·0	87·2	79·0	83·4	79·0	82·2
9	74·4	79·1	78·1	78·1	78·4	79·2	78·2	79·9	80·6	81·3	86·7	83·9	93·5	88·2	89·1	88·8	89·9	88·6	88·0	87·2	78·8	83·3	79·0	82·1
10	74·5	79·0	78·8	78·3	78·3	79·3	77·8	80·0	80·7	81·3	86·5	84·0	93·6	88·3	90·1	88·7	90·1	88·6	88·3	87·3	79·0	83·1	80·2	82·1
11	74·8	78·9	77·6	78·4	78·5	79·3	78·0	80·0	80·3	81·3	85·6	84·1	93·7	88·4	90·6	88·5	89·9	88·6	87·6	87·3	80·3	83·1	81·4	82·1
12	75·4	78·8	77·8	78·6	78·6	79·3	79·5	79·9	81·5	81·4	86·3	84·2	94·3	88·6	90·1	88·6	89·1	88·5	85·9	87·3	81·1	83·0	81·7	82·1
13	75·2	78·7	78·0	78·7	77·8	79·5	80·5	79·8	82·7	81·3	86·5	84·3	94·0	88·8	89·9	88·5	89·1	88·6	84·9	87·3	81·3	83·0	80·8	82·1
14	75·3	78·7	78·1	78·8	77·8	79·5	80·9	79·9	83·1	81·3	86·2	84·3	92·8	88·8	89·6	88·7	89·0	88·5	84·8	87·1	80·6	83·0	81·3	82·1
15	75·3	78·6	78·4	78·9	77·7	79·4	80·3	80·0	82·6	81·4	86·6	84·4	92·2	88·9	89·9	88·5	88·3	88·3	84·5	87·1	80·4	83·1	82·0	82·1
16	75·0	78·4	78·2	78·9	77·8	79·3	80·8	80·3	81·8	81·7	87·2	84·4	91·7	88·9	89·5	88·7	87·9	88·3	85·1	86·9	79·0	83·0	81·1	82·1
17	74·7	78·6	78·7	79·0	77·8	79·3	80·7	80·2	82·9	81·9	88·3	84·6	91·0	89·1	89·2	88·7	87·0	88·3	84·9	86·7	80·1	82·8	79·9	82·2
18	74·4	78·3	78·6	79·1	77·5	79·3	81·8	80·4	83·1	81·9	89·3	84·7	91·1	88·9	89·1	88·5	86·7	88·1	85·6	86·4	80·3	82·7	78·8	82·2
19	74·3	78·4	78·2	79·1	77·4	79·3	81·3	80·6	83·7	81·9	90·3	84·9	90·6	88·9	89·3	88·4	87·0	88·1	85·7	86·3	80·3	82·6	77·5	82·1
20	74·2	78·3	77·6	79·2	77·0	79·3	81·4	80·6	83·9	82·0	90·6	85·2	90·3	88·9	89·5	88·4	87·2	87·9	86·2	86·3	80·8	82·6	78·0	82·0
21	74·7	78·2	76·6	79·3	77·0	79·3	81·6	80·7	83·2	82·2	91·0	85·6	90·1	88·7	89·2	88·3	86·9	87·8	86·0	86·3	81·3	82·6	77·9	81·8
22	76·2	78·1	76·2	79·2	78·7	79·2	81·6	80·9	84·7	82·2	92·0	86·0	90·1	88·6	89·4	88·3	87·3	87·7	84·7	86·3	81·1	82·6	78·0	81·6
23	76·2	78·1	76·2	79·2	79·2	79·2	81·7	80·9	85·0	82·2	92·7	86·0	91·2	88·6	89·1	88·3	87·6	87·6	83·9	86·3	81·7	82·6	78·0	81·4
24	76·6	78·1	75·8	79·1	77·8	79·3	80·5	81·1	84·6	82·4	92·2	86·3	91·3	88·7	89·1	88·4	87·8	87·5	83·0	86·2	81·2	82·6	78·5	81·5
25	77·0	78·2	75·9	79·0	78·7	79·5	80·2	81·1	84·3	82·8	92·2	86·6	92·0	88·6	89·7	88·3	88·1	87·4	82·8	86·1	82·1	82·6	79·1	81·3
26	77·0	78·3	75·5	78·9	79·9	79·4	80·3	81·1	84·2	82·8	92·3	86·7	92·6	88·7	89·8	88·3	88·5	87·4	82·9	86·0	80·7	82·8	77·9	81·2
27	76·6	78·3	75·6	78·8	80·0	79·5	80·4	81·1	84·3	82·9	91·8	86·9	91·9	88·8	89·1	88·3	88·8	87·6	82·0	85·7	81·0	82·8	77·8	81·1
28	76·6	78·4	78·1	78·7	80·0	79·5	80·0	81·0	84·8	83·0	91·3	87·1	92·4	88·8	89·2	88·2	89·1	87·6	82·5	85·4	81·3	82·7	77·0	81·1
29	77·0	78·4			79·8	79·7	80·5	81·0	85·2	82·9	91·4	87·3	92·3	88·9	88·9	88·2	88·8	87·6	81·8	85·3	81·7	82·6	76·0	81·1
30	76·5	78·5			78·6	79·9	80·6	81·1	85·4	83·1	91·0	87·3	91·6	89·1	88·7	88·2	88·1	87·7	80·6	85·1	81·1	82·7	75·7	81·0
31	76·8	78·5			78·0	80·0			85·3	83·1			90·9	89·0	88·5	88·3			80·0	85·0			75·8	80·7
Mean	75·5	78·8	76·9	78·7	78·4	79·3	79·9	80·4	82·8	81·9	88·5	84·9	92·0	88·5	89·6	88·6	88·8	88·1	85·1	86·6	80·4	83·2	79·1	81·9
											Year		83·1	83·4										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

180 KEW OBSERVATORY 1941

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	72·4	72·8	75·2	72·6	78·2	75·3	80·6	86·4	76·7	72·2	69·8	67·7
2	66·3	70·3	79·6	74·7	77·9	80·0	84·1	86·9	81·9	74·1	75·5	75·7
3	64·7	69·7	70·8	76·4	72·4	79·7	82·9	74·8	84·1	75·6	72·4	74·1
4	67·9	64·5	67·4	72·9	*63·8*	78·2	84·8	81·4	82·4	81·9	73·6	78·6
5	71·8	*60·9*	64·5	69·1	67·7	84·6	*76·4*	82·1	83·6	86·3	69·1	78·2
6	72·0	71·4	75·7	75·7	67·0	84·3	80·9	81·3	86·9	85·3	68·5	79·8
7	70·3	67·4	73·7	68·8	70·3	*74·7*	79·1	*74·1*	84·4	79·6	74·3	75·3
8	71·2	73·9	78·3	71·3	66·3	81·6	80·7	79·6	74·7	86·9	69·1	70·2
9	69·6	80·3	70·8	68·7	69·6	77·6	87·5	77·6	80·3	83·1	67·5	74·6
10	65·7	75·4	74·1	*66·6*	69·3	82·9	84·2	87·4	83·4	86·8	73·4	82·3
11	74·3	65·9	73·9	72·2	64·7	77·9	84·1	86·9	79·7	83·6	76·7	80·8
12	74·7	72·3	75·7	80·2	71·3	75·2	85·3	80·3	75·9	70·3	80·8	82·2
13	65·1	75·9	71·4	78·1	77·6	74·2	88·0	82·0	78·6	69·9	79·2	74·7
14	70·3	71·1	70·3	79·1	81·4	74·6	83·7	82·5	79·7	75·7	72·4	81·9
15	71·7	75·2	68·1	73·6	76·3	86·1	85·9	82·5	78·5	76·4	73·9	81·2
16	56·9	72·6	68·0	67·6	64·7	77·0	85·8	80·0	82·4	80·8	*65·2*	75·4
17	*56·6*	78·9	69·3	67·0	68·5	78·3	81·9	80·3	*72·5*	75·3	79·6	72·0
18	59·2	71·4	66·8	77·5	68·4	78·7	85·3	84·6	73·7	84·7	76·8	65·6
19	72·6	72·8	64·7	72·5	74·2	81·9	82·4	77·2	78·1	84·2	74·1	64·7
20	68·6	71·6	66·3	72·6	76·1	80·3	80·6	78·7	84·7	85·3	77·6	69·8
21	75·2	64·2	66·0	76·8	71·9	82·8	79·1	78·1	75·0	79·1	80·3	71·7
22	78·0	63·5	77·6	70·1	81·8	85·9	79·1	82·7	78·1	71·4	73·1	69·5
23	69·1	70·2	80·0	75·9	83·5	89·2	80·5	78·5	78·1	73·5	73·7	68·7
24	72·0	63·9	*63·0*	71·3	78·4	80·2	78·9	85·9	85·5	71·3	72·6	75·3
25	76·9	66·8	76·4	74·3	79·1	81·1	82·4	83·0	80·8	76·9	83·5	77·5
26	75·6	71·7	79·6	75·3	73·4	84·1	87·4	83·4	80·8	75·7	68·6	*64·1*
27	74·1	69·4	71·4	74·5	79·1	78·1	85·2	80·8	81·1	73·6	74·8	70·8
28	74·7	81·8	69·7	74·8	73·6	78·7	84·5	84·2	81·5	80·3	80·9	65·8
29	75·2		74·8	76·9	78·6	87·8	86·9	82·5	83·8	71·9	79·8	71·7
30	74·1		68·3	75·9	82·5	77·9	81·9	82·4	73·7	72·4	76·3	69·2
31	75·6		62·4		81·7		82·4	76·0		*66·3*		72·3
Mean	70·4	70·9	71·4	73·4	73·8	80·3	83·0	81·4	80·0	77·8	74·4	73·6
						Year	75·9					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

Mean value for periods of twenty minutes about 14h. 30m.

F = Potential gradient, unit 1 v./cm. $\lambda+$ = Conductivity due to positive ions, unit 10^{-10} ohms/cm.
i = Air-earth current, unit 10^{-16} amp./cm.^{2}

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	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	2·10	38	81	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	2·10	35	76	...	...	...	...	...	...	...	...	...	1·72	9	15	...	...	...
3	...	...	...	3·51	23	80	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	7·00	26	183	2·35	30	70	...	...	...	...	...	...	0·94	51	48
5	...	...	...	...	...	...	2·96	33	98	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·12	46	97
7	...	...	...	...	...	...	...	...	...	...	...	...	2·62	44	116	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	1·63	10	16	...	...	...
9	2·78	15	43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	2·62	16	42	...	...	...	...	...	...	4·49	22	100	...	...	...	...	...	...
11	...	...	...	4·54	22	102	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	2·10	17	35	...	...	...	...	...	...	...	...	...	...	...	...
13	1·15	21	25	4·08	19	77	...	...	...	...	...	...	1·41	64	91	1·32	39	51
14	...	...	...	...	...	...	6·56	12	82	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	7·72	5	40	...	...	...	...	...	...	...	...	...	...	...	...	1·74	50	87
17	5·70	11	64	...	...	...	0·85	36	31	1·94	35	67	...	...	...	...	...	...
18	...	...	...	...	...	...	2·56	47	120	...	...	...	...	...	...	1·49	82	122
19	...	...	...	3·10	23	71	0·67	48	32	...	...	...	1·27	33	42	...	...	...
20	...	...	...	2·41	30	73	3·83	9	36	...	...	...	...	...	...	0·83	17	14
21	...	...	...	...	...	...	...	...	...	2·18	24	53	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	1·31	72	94	1·58	125	199
23	2·78	17	49	...	...	...	...	...	...	1·67	24	40	...	...	...	1·83	63	115
24	3·82	15	58	3·43	21	73	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	3·32	47	155	...	...	...	3·97	72	286	...	...	...	1·37	72	98
26	...	...	...	3·16	–	–	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	2·48	38	94	0·90	88	79	...	...	...
29	...	...	...				...	...	...	0·58	–	–	...	...	...	...	...	...
30	...	...	...				...	...	...	1·43	41	59	...	...	...	1·48	90	134
31	...	...	...				...	...	...				...	...	...			
Mean	3·42	19	53	3·67	25	94	2·83	31	67	2·34	37	100	1·55	46	65	1·47	63	97
No. of days used	9	9	9	10	9	9	7	7	7	8	7	7	7	7	7	10	10	10

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	1·11	83	93	...	...	...	3·32	18	58	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	1·35	110	149	...	...	...	2·21	48	107	...	...	...	...	...	...	...	...	...
4	1·37	117	160	...	...	...	1·65	72	118	...	...	...	4·31	24	105	5·55	10	55
5	...	...	...	...	...	...	...	...	...	...	...	...	5·62	22	124	4·18	24	100
6	...	...	...	...	...	...	...	...	...	2·25	53	118	...	...	...	...	...	...
7	1·22	150	183	1·55	70	109	...	...	...	...	...	...	3·16	27	87	...	...	...
8	1·18	148	174	...	...	...	2·11	68	143	3·18	42	135	...	...	...	3·33	14	47
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	1·61	87	140	...	...	...	1·48	88	130	2·13	41	88	...	...	...	...	...	...
11	2·10	66	140	1·88	58	110	...	...	...	...	...	...	...	...	...	4·57	31	141
12	...	...	...	1·33	88	117	1·51	52	78	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	2·70	51	137	...	...	...	...	...	...
14	1·01	105	106	1·56	85	133	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	3·26	34	111	...	...	...	5·07	18	91	...	...	...
16	...	...	...	...	...	...	...	...	...	3·16	34	109	...	...	...	3·21	18	57
17	...	...	...	...	...	...	1·02	24	25	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7·72	–	–
19	...	...	...	1·74	64	112	1·97	34	67	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	1·57	70	111	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	1·34	86	116	...	...	...	1·65	22	36	2·77	39	109	...	...	...	2·98	47	141
23	...	...	...	...	...	...	3·34	13	43	3·49	40	140	...	...	...	...	...	...
24	1·25	132	166	...	...	...	...	...	...	1·72	30	53	...	...	...	...	...	...
25	1·50	137	206	2·05	61	124	2·07	67	139	...	...	...	4·22	3	13	...	...	...
26	...	...	...	1·39	79	110	...	...	...	...	...	...	4·23	16	69	...	...	...
27	...	...	...	1·66	56	93	...	...	...	...	...	...	...	...	...	...	...	...
28	1·66	103	171	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	4·34	49	206	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	3·45	19	65	...	...	...	5·96	9	55
31	...	...	...	...	...	...				4·37	33	142				...	...	...
Mean	1·43	109	152	1·86	69	121	2·02	47	91	2·96	36	105	4·43	18	81	4·69	22	85
No. of days used	12	12	12	10	10	10	11	11	11	11	11	11	6	6	6	8	7	7
Year: Mean										2·63	47	96						
Year: No. of days used										109	106	106						

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0	···	2	4·0	1	1·9	2	16·5	2	10·9	2	3·6
2	1	0·4	1	1·5	2	6·1	2	9·9	2	3·6	0	···
3	1	0·4	2	7·5	1	2·2	1	2·8	0	···	1	0·2
4	0	···	1	1·4	1	1·2	2	3·2	0	···	1	2·0
5	1	2·8	1	1·8	1	0·4	1	2·4	0	···	1	2·0
6	2	5·1	1	0·8	2	17·7	1	0·5	0	···	1	0·2
7	1	0·5	1	1·9	2	15·2	0	···	0	···	2	4·4
8	2	10·2	0	···	1	2·3	0	···	0	···	2	4·1
9	1	1·7	1	1·4	2	4·7	0	···	0	···	1	1·0
10	1	2·8	1	0·2	1	2·9	0	···	0	···	2	8·0
11	1	2·6	1	0·3	0	···	0	···	1	0·1	0	···
12	1	0·1	1	2·2	0	···	0	···	0	···	0	···
13	1	0·3	1	2·4	0	···	0	···	0	···	0	···
14	1	0·7	2	4·3	1	0·1	1	0·6	1	0·8	0	···
15	2	4·4	1	0·4	1	0·2	1	0·9	1	2·0	1	0·1
16	0	···	2	9·3	1	0·2	0	···	0	···	0	···
17	0	···	2	5·5	1	0·1	0	···	0	···	0	···
18	2	6·3	2	5·1	0	···	1	2·4	1	2·8	0	···
19	1	2·0	2	4·8	0	···	1	1·3	0	···	0	···
20	1	3·2	1	0·5	1	1·0	2	4·0	1	0·5	0	···
21	2	8·6	0	···	1	0·1	1	0·2	0	···	0	···
22	1	2·0	0	···	1	1·2	1	1·0	1	0·2	0	···
23	2	4·0	0	···	1	1·4	0	···	1	2·8	1	0·8
24	1	1·3	0	···	1	1·7	1	1·3	2	4·3	0	···
25	2	7·6	0	···	2	3·2	1	0·7	2	7·0	0	···
26	0	···	0	···	2	5·9	0	···	2	6·9	0	···
27	2	4·6	2	8·6	0	···	0	···	2	4·0	0	···
28	2	8·7	1	0·8	2	6·3	0	···	0	···	1	1·6
29	1	0·8			1	1·9	0	···	2	3·1	1	0·4
30	1	2·0			0	···	0	···	2	4·7	0	···
31	2	6·0			0	···			1	2·0		
Total	–	89·1	–	64·7	–	77·9	–	47·7	–	55·7	–	28·4
No. of days used	–	31	–	28	–	31	–	30	–	31	–	30
Mean	–	2·9	–	2·3	–	2·5	–	1·6	–	1·8	–	0·9

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1	0·1	1	0·6	0	···	0	···	1	0·4	1	2·1
2	0	···	0	···	0	···	1	0·1	0	···	1	1·7
3	1	1·7	0	···	0	···	1	0·1	0	···	0	···
4	1	1·9	2	4·5	0	···	1	1·1	2	3·7	0	···
5	0	···	1	2·2	1	0·5	0	···	0	···	0	···
6	0	···	1	1·9	1	1·6	1	1·0	0	···	2	5·7
7	0	···	0	···	0	···	1	0·9	1	1·4	1	2·8
8	1	1·5	1	1·5	0	···	0	···	1	0·1	0	···
9	2	3·5	1	1·0	0	···	0	···	0	0·2	0	···
10	0	···	0	···	1	0·2	1	0·2	2	6·0	0	···
11	1	1·5	1	2·7	0	···	2	3·3	2	4·6	1	0·6
12	2	3·1	1	0·3	0	···	0	···	1	2·8	1	1·3
13	1	0·7	1	0·9	1	0·5	0	···	2	5·0	0	···
14	1	0·9	0	···	1	1·6	1	1·5	1	1·2	2	4·1
15	2	3·5	1	2·5	0	···	0	···	0	···	1	0·5
16	0	···	1	0·6	0	···	1	0·8	2	6·0	0	···
17	0	···	1	0·7	1	0·2	1	0·4	2	3·0	1	0·2
18	1	1·0	2	4·7	0	···	0	···	0	···	0	···
19	2	4·5	2	3·0	0	···	0	···	1	0·5	1	0·1
20	1	0·7	1	1·6	1	1·0	1	0·5	1	0·3	1	1·3
21	0	···	1	0·4	1	0·1	0	···	1	1·3	0	···
22	1	0·8	0	···	0	···	0	···	2	3·1	0	···
23	1	0·6	2	8·0	1	0·3	0	···	0	···	0	···
24	0	···	0	···	0	···	2	3·3	0	···	0	···
25	0	···	0	···	0	···	2	6·8	1	0·4	1	0·5
26	2	6·5	0	···	0	···	1	1·4	0	···	0	···
27	1	0·2	0	···	0	···	0	···	0	···	2	6·2
28	1	0·9	1	2·1	1	2·0	1	1·0	1	1·4	0	···
29	2	5·4	1	0·7	1	0·4	1	0·6	1	0·9	0	···
30	1	2·5	0	···	0	···	1	1·4	0	···	1	0·5
31	1	0·1	0	···			1	1·4			0	···
Total	–	41·6	–	39·9	–	8·4	–	25·8	–	42·3	–	27·6
No. of days used	–	31	–	31	–	30	–	31	–	30	–	31
Mean	–	1·3	–	1·3	–	0·3	–	0·8	–	1·4	–	0·9

Annual values: Character 0 1 2
No. of days used 150 151 64

Duration: Total 529·1 hr.
No. of days 365
Mean 1·50 hr.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)
Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JANUARY, factor 2·86				FEBRUARY, factor 2·92 (1st-24th) 4·54 (24th-28th)				MARCH, factor 4·54 (1st-18th) 4·02 (18th-31st)			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	195	540	270	375	-60	320	430	460	240	120	165	215
2	300	330	255	45	185	340	290	30	0	-380	285	430
3	165	270	225	300	-120	-30	385	140	285	405	285	-70
4	180	225	420	330	355	490	645	355	360	905	215	145
5	180	135	15	75	705	290	155	-15	95	430	285	405
6	330	60	165	120	0	615	570	860	-525	-380	360	-335
7	165	240	465	315	630	320	460	720	620	-765	215	-50
8	-180	-90	60	180	260	370	400	490	-670	165	120	310
9	165	360	300	240	120	260	260	305	215	0	120	120
10	150	315	315	60	245	535	245	675	25	285	190	190
11	-75	390	285	210	585	1320	430	260	165	165	120	70
12	105	240	300	705	275	305	155	-645	70	145	145	120
13	375	810	210	675	305	460	400	490	145	215	260	165
14	510	-420	-555	450	-490	355	400	-400	0	360	550	260
15	60	450	-90	540	170	460	275	505	215	310	260	190
16	330	495	720	375	45	15	125	-765	190	430	455	50
17	435	795	540	1050	45	-340	15	520	215	240	70	380
18	585	465	255	330	75	275	555	90	145	525	235	490
19	-315	510	90	540	-305	185	290	200	170	190	75	175
20	120	315	195	270	105	305	185	735	100	455	375	275
21	465	-540	-810	375	570	475	275	385	250	325	275	300
22	165	90	-225	630	320	645	320	340	100	455	200	200
23	705	120	345	15	185	355	170	475	125	175	275	480
24	-60	270	360	795	460	830	405	145	200	655	225	200
25	-75	-330	-435	240	260	715	285	880	175	325	225	25
26	60	180	150	300	475	500	310	335	75	300	75	-50
27	225	135	120	300	-260	-145	-25	145	200	250	200	455
28	-180	-645	-1515	240	70	165	70	310	455	325	430	-275
29	345	210	120	285					0	300	175	250
30	180	270	330	315					275	325	375	630
31	360	15	90	330					350	300	-	430
(a)	274	317	264	355	280	436	315	410	188	324	241	268
(b)	193	200	96	355	186	371	303	287	131	242	241	192
Mean	(a) 303		(b) 211		(a) 360		(b) 287		(a) 255		(b) 201	

	APRIL, factor 4·02				MAY, factor 4·06				JUNE, factor 4·05			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	225	Z-	-630	150	-255	-150	190	45	320	-85	125	170
2	175	0	Z-	275	0	-85	170	235	150	170	255	150
3	75	250	125	350	275	85	130	170	125	150	340	85
4	-150	300	25	605	190	275	150	190	125	65	85	Z-
5	430	375	150	125	45	255	215	190	Z-	405	555	170
6	125	75	275	150	105	170	150	235	150	190	190	170
7	200	480	480	505	130	235	235	235	385	445	Z+	-255
8	325	300	175	225	255	215	170	215	275	125	20	425
9	250	300	455	375	300	320	235	190	235	235	-	-
10	325	275	430	375	215	275	215	170	-	-	-295	-85
11	125	300	300	225	255	300	130	130	85	275	215	125
12	225	325	175	350	105	255	215	300	105	170	125	405
13	225	250	225	325	170	215	130	190	255	190	170	190
14	150	150	100	480	105	150	190	85	255	125	105	190
15	225	0	200	300	65	105	0	190	20	125	150	170
16	325	480	150	250	130	215	235	235	170	255	170	170
17	150	375	200	250	275	320	105	170	170	255	215	275
18	175	225	100	150	170	190	45	-790	320	360	170	105
19	200	100	225	275	65	85	150	130	85	150	65	255
20	325	350	-100	375	65	85	150	130	85	150	65	255
21	150	300	225	300	235	130	105	190	125	340	150	320
22	300	455	75	25	85	235	130	105	340	445	125	235
23	50	125	150	200	20	130	65	340	125	215	-	170
24	225	325	275	300	215	255	105	170	125	405	125	170
25	50	200	375	430	170	190	105	-640	150	295	125	190
26	275	375	225	225	235	-45	-425	-300	105	235	-	105
27	175	150	125	200	130	65	170	425	85	255	170	215
28	225	275	225	275	300	215	65	170	150	295	105	-20
29	175	225	65	130	85	255	190	-510	45	215	170	170
30	65	150	130	190	-385	385	320	-20	255	125	190	125
31					85	275	130	170				
(a)	205	258	210	280	154	211	153	201	179	247	171	193
(b)	193	267	199	284	126	183	134	87	171	220	158	195
Mean	(a) 238		(b) 236		(a) 180		(b) 133		(a) 197		(b) 186	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)
Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 4·05				AUGUST, factor 4·13				SEPTEMBER, factor 4·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	85	235	65	170	210	345	150	60	265	-	250	425
2	150	150	125	85	85	260	285	300	315	315	265	275
3	65	190	85	40	200	335	185	150	185	425	150	300
4	20	235	125	105	185	250	10	Z-	175	235	375	100
5	85	235	125	150	125	300	395	320	115	350	300	50
6	215	190	125	170	110	300	50	535	125	335	200	515
7	85	360	125	255	595	345	185	260	115	335	185	525
8	190	575	105	105	200	420	260	445	185	250	225	215
9	-20	255	170	20	320	395	175	210	125	165	175	175
10	65	105	125	85	35	160	125	235	50	285	150	415
11	105	125	190	0	150	-395	135	320	165	225	200	275
12	65	275	Z-	215	200	300	150	320	185	265	175	115
13	85	255	190	125	175	150	60	185	100	175	175	285
14	125	235	105	105	175	135	175	260	125	215	75	-35
15	215	255	150	40	50	125	-	250	175	385	325	575
16	105	275	-	360	160	310	185	345	225	265	-	365
17	235	385	150	320	60	235	200	285	200	365	125	350
18	125	235	-	150	-35	135	160	345	50	300	115	365
19	150	340	-65	255	50	300	175	25	365	315	225	350
20	85	340	125	190	110	370	Z±	435	385	175	50	385
21	215	255	150	215	250	435	200	300	185	415	165	215
22	190	255	125	125	185	175	250	360	225	185	175	165
23	85	235	125	125	300	185	-670	270	125	115	300	115
24	255	385	125	150	125	210	150	235	265	175	275	265
25	125	235	170	150	85	200	200	345	225	235	215	265
26	275	-110	-190	40	270	270	135	335	175	185	185	450
27	255	170	125	170	210	335	175	300	425	235	165	235
28	150	275	150	85	0	260	150	395	150	250	115	225
29	-65	215	190	-65	185	260	385	360	35	265	175	350
30	215	360	Z+	170	200	310	210	285	200	485	185	515
31	85	295	255	170	135	320	175	235				
(a)	142	264	140	145	171	271	182	290	188	273	196	306
(b)	130	247	120	125	170	250	157	286	184	274	194	287
Mean	(a) 173		(b) 155		(a) 229		(b) 216		(a) 241		(b) 235	

	OCTOBER, factor 4·18				NOVEMBER, factor 4·12				DECEMBER, factor 4·13			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	300	490	300	215	150	260	495	480	535	535	-150	185
2	330	680	140	40	135	220	370	-	-60	560	535	955
3	200	515	140	415	-	-	170	380	730	730	535	460
4	290	265	50	250	170	-35	455	505	420	645	545	495
5	325	190	240	200	360	690	-	360	485	495	410	320
6	225	350	240	290	505	455	370	370	75	160	75	-200
7	60	350	290	550	100	495	310	790	-125	320	370	560
8	265	365	315	290	505	630	295	320	270	560	370	680
9	110	215	200	275	430	380	420	590	270	270	310	300
10	60	140	215	110	335	-200	-25	345	135	200	260	150
11	100	190	250	425	185	295	455	0	-175	385	470	385
12	315	265	165	365	50	430	545	245	135	135	620	535
13	375	365	250	465	125	-75	220	370	395	670	310	250
14	340	-175	175	300	480	520	320	-75	125	335	-250	250
15	190	450	225	500	285	235	520	590	200	420	110	535
16	100	190	300	475	345	25	10	410	250	705	335	580
17	415	425	240	140	200	360	-320	480	100	335	395	460
18	75	190	140	240	200	730	395	370	445	670	680	395
19	140	75	250	265	410	220	270	135	300	335	580	360
20	100	250	-	350	125	310	310	345	-100	745	435	545
21	140	375	200	375	125	395	-125	580	545	990	770	670
22	290	415	250	250	60	380	295	110	420	495	335	610
23	150	290	325	300	125	345	335	445	445	445	445	345
24	-25	265	125	225	260	360	285	310	150	435	345	410
25	125	-25	315	150	75	245	470	445	160	175	110	420
26	60	110	190	225	480	1035	445	455	485	560	395	495
27	200	550	-	-	125	310	360	260	75	-645	150	535
28	110	50	-	325	25	335	160	285	545	110	300	485
29	150	315	140	400	-160	470	345	100	445	-	820	320
30	150	-	315	250	285	590	590	395	125	520	435	580
31	100	-10	440	415					460	645	630	620
(a)	193	309	229	303	238	412	354	374	323	468	417	463
(b)	193	269	226	302	222	352	304	358	261	431	362	446
Mean	(a) 259		(b) 247		(a) 345		(b) 309		(a) 418		(b) 375	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

(a)	211	316	239	299
(b)	180	275	208	267

Annual

(a) 267 (b) 233

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

184 KEW OBSERVATORY — Selected quiet days

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	Mean
	volts per metre																									
Jan.	−63	−83	*−138*	−95	−37	+15	*+105*	+82	+83	+53	+54	+81	+63	+42	−55	−39	−27	−45	−3	−27	+30	+36	+13	−43	···	419
Feb.	−22	−34	−74	−90	*−109*	−84	−39	+49	+138	*+150*	+67	+8	−54	−62	−50	−51	−43	−1	+43	+150	+89	+19	+23	−21	···	380
Mar.	−59	*−101*	−76	−43	−40	−36	+19	+78	+47	+58	+37	+14	−37	−37	−39	−13	−17	−4	+81	*+89*	+42	+60	+8	−31	···	287
Apr.	*−51*	−32	−31	−37	−38	−12	+65	*+99*	+83	+11	−34	−47	−49	−30	−14	−23	−9	+5	+24	+40	+49	+25	+4	+5	−29	245
May	−4	−9	−17	−26	−6	+64	+66	*+79*	+24	−2	−16	*−40*	−31	−33	−24	−20	−26	−14	−9	0	+12	−3	+17	+17	−2	184
June	0	−2	−10	+7	+27	+55	*+96*	+90	+39	+6	−22	−36	*−52*	−37	−28	−25	−21	−18	−26	−28	+9	−6	−12	−7	−11	199
July	−10	−23	−21	−19	+8	+25	+93	*+103*	+79	+52	+3	−23	−36	−40	−45	*−51*	−49	−45	−31	−20	−1	+24	+20	+7	+4	174
Aug.	−5	−4	−33	−21	−3	+19	+57	*+89*	+46	+27	+8	−25	−52	−50	−51	−56	*−67*	−51	−13	+26	+50	+64	+31	+17	−33	238
Sept.	−43	*−57*	−31	−41	−33	−27	+5	+47	+13	+33	−5	−27	−42	−31	−39	−40	−25	+21	+57	*+87*	+74	+58	+43	0	−6	247
Oct.	−24	−39	−40	−38	−33	−9	+24	+45	+51	+31	−17	−42	−52	*−61*	−51	−28	+5	+31	*+66*	+65	+38	+54	+19	+6	+1	279
Nov.	−66	−96	−106	−126	*−131*	−103	−49	+4	+51	+47	+75	+51	+18	+24	+38	+50	+52	+67	*+92*	+59	+55	+14	+7	−28	···	396
Dec.	−115	−105	*−116*	−107	−105	−95	−25	+18	+101	*+105*	+72	+60	+38	+49	+18	+14	+47	+78	+78	+62	+34	+2	−27	−84	−69	413
Year	−39	−49	*−58*	−53	−42	−17	+35	*+65*	+63	+48	+19	−2	−24	−22	−28	−23	−15	+2	+30	+42	+40	+29	+12	−13	···	288
Winter	−67	−79	*−109*	−105	−95	−67	−2	+38	*+93*	+89	+67	+50	+16	+13	−12	−7	+7	+25	+53	+61	+52	+18	+4	−44	···	402
Equinox	−44	*−57*	−45	−40	−36	−21	+28	+67	+49	+33	−5	−25	−45	−40	−36	−26	−11	+13	+57	*+70*	+51	+49	+19	−5	···	265
Summer	−5	−9	−20	−15	+7	+41	+78	*+90*	+47	+21	−7	−31	*−43*	−40	−37	−38	−41	−32	−20	−5	+17	+20	+14	+9	···	199

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

† See p. 10. *Observatories' Year Book, 1938*

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

185 KEW OBSERVATORY — Complete days only

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean	No. of days used
	milligrams per cubic metre																									
Jan.	0·11	*0·10*	0·10	0·12	0·13	0·19	0·27	0·31	0·35	0·37	0·35	0·35	0·32	0·29	0·30	0·31	0·36	*0·41*	0·36	0·32	0·27	0·22	0·19	0·16	0·26	30
Feb.	0·10	0·09	0·09	*0·09*	0·10	0·16	0·28	0·37	*0·40*	0·31	0·26	0·23	0·22	0·20	0·15	0·18	0·23	0·27	0·31	0·30	0·24	0·20	0·17	0·14	0·21	26
Mar.	0·12	0·12	*0·10*	*0·10*	*0·10*	0·13	0·24	0·32	*0·37*	0·30	0·28	0·23	0·24	0·21	0·20	0·20	0·24	0·27	0·28	0·30	0·25	0·21	0·18	0·15	0·22	31
Apr.	*0·05*	*0·05*	*0·05*	*0·05*	0·06	0·09	0·14	*0·16*	0·15	0·12	0·12	0·14	0·11	0·11	0·11	0·12	0·12	0·13	0·14	*0·16*	0·15	0·13	0·11	0·06	0·11	28
May	*0·06*	0·07	*0·06*	0·07	0·11	0·13	*0·15*	0·14	0·12	0·09	0·08	0·08	0·08	0·08	0·07	0·07	0·09	0·10	0·10	0·10	0·10	0·09	0·08	*0·06*	0·09	31
June	*0·04*	0·05	0·06	0·08	0·09	0·11	*0·13*	0·11	0·09	0·09	0·06	0·05	0·04	0·05	0·06	0·05	0·06	0·07	0·08	0·07	0·06	0·07	0·06	0·05	0·07	30
July	0·03	0·03	0·03	0·05	0·07	*0·09*	0·09	0·09	0·07	0·05	0·03	0·02	0·03	0·03	0·02	*0·02*	*0·02*	*0·02*	0·03	0·03	0·03	0·03	0·03	0·02	0·04	31
Aug.	0·02	0·03	0·03	0·03	0·04	0·05	*0·05*	0·05	0·05	0·03	0·02	0·02	0·02	*0·02*	0·02	*0·02*	*0·02*	0·03	0·04	0·03	0·03	0·02	0·02	0·02	0·03	31
Sept.	0·10	0·10	0·10	0·11	0·11	0·13	0·16	*0·18*	0·14	0·12	0·13	0·09	*0·09*	0·10	0·09	*0·09*	0·10	0·11	0·12	0·13	0·12	0·12	0·12	0·10	0·11	28
Oct.	*0·09*	*0·09*	0·10	0·09	0·09	0·12	0·16	*0·19*	0·17	0·15	0·11	0·09	0·09	0·10	0·10	0·12	0·13	0·17	0·17	0·15	0·13	0·12	0·10	0·09	0·12	31
Nov.	0·08	0·07	*0·06*	0·06	0·06	0·08	0·14	0·21	0·22	0·20	0·22	0·16	0·13	0·15	0·17	0·20	0·26	0·29	0·31	*0·32*	0·24	0·19	0·14	0·11	0·17	30
Dec.	0·15	0·12	*0·11*	0·11	0·12	0·15	0·22	0·33	0·37	0·40	0·41	0·38	0·36	0·36	0·34	0·37	0·42	*0·45*	0·42	0·40	0·34	0·27	0·21	0·17	0·29	31
Year	0·08	0·08	*0·07*	0·08	0·09	0·12	0·17	0·21	*0·21*	0·19	0·17	0·15	0·14	0·14	0·14	0·15	0·17	0·19	0·20	0·19	0·16	0·14	0·12	0·09	0·14	358
Winter	0·11	0·09	*0·09*	0·09	0·10	0·15	0·23	0·31	0·33	0·32	0·31	0·28	0·26	0·25	0·24	0·27	0·32	*0·35*	0·35	0·33	0·27	0·22	0·18	0·15	0·23	117
Spring	0·09	0·09	*0·07*	*0·07*	0·08	0·11	0·19	0·24	*0·26*	0·21	0·20	0·19	0·17	0·16	0·15	0·16	0·18	0·20	0·21	0·23	0·20	0·17	0·15	0·11	0·17	59
Autumn	0·09	0·09	0·10	0·10	0·10	0·13	0·16	*0·19*	0·15	0·13	0·12	0·09	*0·09*	0·10	0·09	0·11	0·11	0·14	0·15	0·14	0·13	0·12	0·11	0·09	0·11	59
Summer	*0·04*	0·05	0·05	0·06	0·08	0·09	*0·11*	0·10	0·08	0·07	0·05	0·04	0·04	0·05	0·04	0·04	0·05	0·05	0·06	0·06	0·05	0·05	0·04	0·04	0·06	123

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